By: E-mail and Parivesh

Ref. No.: FAMD/FAPJ/ 528/FY26

Date: 22.05.2025

To,
The Deputy Director General of Forest (Central),
Ministry of Environment and Forest & Climate Change,
Region Office, A/3, Chandrasekharpur,
Bhubaneswar-751023

Subject: Submission of half-yearly compliance report on the stipulated environmental clearance terms and conditions in respect of Ferro Alloys Plant, Joda of M/s TATA Steel Ltd., for the period from October'2024 to March'2025.

Reference:

1) MoEF File No: J-11011/03/2012-IA II (I) DATED 5th Nov 2015.
2) MoEF&CC's notification vide S.O-5845 (E), dt. 28th Nov 2018.

Respected Sir,

We are herewith submitting the six-monthly compliance report on the status of the implementation of the conditions stipulated in environmental clearance awarded to us vide MoEF File No: **J-11011/03/2012-IA II (I) DATED 5th Nov 2015** in respect of Ferro Alloys Plant, Joda of M/s TATA Steel Ltd. for the period from October'2024 to March'2025 for your kind perusal.

This is in reference to the MoEF&CC's notification vide S.O-5845, dt. 28th Nov 2018, the six-monthly compliance report is being submitted only in soft copy mode, shared with your good office at e-mail @ roez.bsr-mef@nic.in.

We believe the above submission is in order.

Thanking you,

Yours faithfully,
F: TATA STEEL LTD.

Head
Ferro Alloys Plant, Joda

Encl: As above.

Copy To:

1) The chairman, Central Polluton Control Board, Southern conclave, block-502, 5th and 6th Floor 1582 Rajadanga Main road, Kolkata-700107 (W.B.)
2) The Member Secretary, State Pollution Control Board, A/118, Nilakantha Nagar, Bhubaneswar, Odisha-751012
3) The Regional Officer, State Pollution Control Board, Baniapat, DD College Road, Keonjhar, Odisha-758001.

TATA STEEL LTD.

Ferro Alloys & Minerals Division, Ferro Alloys Plant, JodaAt/P.O.: Joda,
Dist: Keonjhar Odisha – 758 034 Tel.: 9238101370, e-mail : mnminesadmin@tatasteel.com
Regd. Office: Bombay House, 24 Homi Modi Street, Mumbai – 400 001 Tel 912266658282, Fax 912266657724
Corporate Identity Number L27100MH1907PLC000260 website: www.tatasteel.com

Your (Half Yearly Compliance Report) has been Submitted with following details	
Proposal No	IA/OR/IND/4054/2012.
Compliance ID	104331571
Compliance Number(For Tracking)	EC/M/COMPLIANCE/104331571/2025
Reporting Year	2025
Reporting Period	01 Jun(01 Oct - 31 Mar)
Submission Date	31-05-2025
RO/SRO Name	Shri Senthil Kumar Sampath
RO/SRO Email	agmu156@ifs.nic.in
State	ODISHA
RO/SRO Office Address	Integrated Regional Offices, Bhubaneswar
Note:- SMS and E-Mail has been sent to Shri Senthil Kumar Sampath, ODISHA with Notification to Project Proponent.	

Half Yearly Compliance Report
2025
01 Jun(01 Oct - 31 Mar)

Acknowledgement

Proposal Name	Expansion of high carbon Fe-Mn alloy Plant (from 0.0504 MTPA to 0.06 MTPA) and addition of 0.06 MTPA Silico-Manganese Plant and 0.05 MTPA Manganese Sinter Plant in existing Ferro Alloys Plant by M/s Tata Steel Limited at Joda, Keonjhar District
Name of Entity / Corporate Office	Tata Steel Ltd
Village(s)	N/A
District	KENDUJHAR

Proposal No.	IA/OR/IND/4054/2012.
Plot / Survey / Khasra No.	N/A
State	ODISHA
MoEF File No.	J-11011/03/2012-IA II (I)

Category	Industrial Projects - 1
Sub-District	N/A
Entity's PAN	*****2803M
Entity name as per PAN	UTSAV KASHYAP

Compliance Reporting Details

Reporting Year	2025
Remarks (if any)	The Environmental Clearance Compliance Report for the period October 2024 to March 2025 has been prepared and uploaded in accordance with the prescribed format. The report addresses both specific and general conditions stipulated in the Environmental Clearance granted to the project.
Reporting Period	01 Jun(01 Oct - 31 Mar)

Details of Production and Project Area

Name of Entity / Corporate Office Tata Steel Ltd

	Project Area as per EC Granted	Actual Project Area in Possession
Private	0	0
Revenue Land	0	0
Forest	0	0
Others	19.07	19.07
Total	19.07	19.07

Production Capacity

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	High Carbon FeMn	Million Tons per Annum (MTPA)	31/03/2027	0.06	0.048	0.06
2	Silico Manganese Plant	Million Tons per Annum (MTPA)	N/A	0.06	NA	0
3	Manganese Sinter Plant	Million Tons per Annum (MTPA)	N/A	0.05	NA	0

Conditions

Specific Conditions

Sr.No.	Condition Type	Condition Details
1	AIR QUALITY MONITORING AND PRESERVATION	The project proponent should install 24x7 air monitoring devices to monitor air emission, as provided by CPCB and submit report to Ministry and its Regional Office.
PPs Submission: Complied A continuous emission monitoring system (CEMS), including a stack analyzer, has been installed and is operational 24x7 to monitor air emissions. Monthly reports are being submitted to State Pollution Control Board Odisha.		Date: 31/05/2025
2	AIR QUALITY MONITORING AND PRESERVATION	Stack of adequate height and diameter with continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz, Electrostatic precipitator (ESP), bag house, bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm3 and installing energy efficient technology
PPs Submission: Complied The plant currently operates with two semi-closed electric arc furnaces, each furnace equipped with two gas cleaning plants, one of which is operational while the other serves as a standby. Each Gas Cleaning Plant (GCP) has one stack of height around 36.57 mtr above ground level with internal diameter of 0.4 mtr. The pollution control measures such as Gas Cleaning plant with venturi scrubbers are also provided with online Continuous Emission Monitoring System (CEMS). The results for emission parameters in the flue gas are observed to be well within the OSPCB prescribe limits. The stack emission parameter testing is carried out by an NABL Accredited laboratory on monthly basis. The report indicates that the emission parameters conform to the applicable permissible standards		Date: 31/05/2025
3	AIR QUALITY MONITORING AND PRESERVATION	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
PPs Submission: Complied Presently, ambient Air Quality Standard notified vide G.S.R. No. 826(E) dated 16th November 2009 is followed.		Date: 31/05/2025
4	AIR QUALITY	Gaseous emission levels including secondary fugitive emissions

	MONITORING AND PRESERVATION	from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines/Code of Practice issued by the CPCB should be followed. New standards for the sponge iron plant issued by the Ministry vide G.S.R. 414 (E) dated 30th May, 2008 should be followed.
PPs Submission: Complied In compliance with the G.S.R. 414 (E) dated 30th May 2008, gaseous and fugitive emission is controlled by mist canon, water sprinkler and DE system. As a result of these measures, fugitive dust levels when monitored were found within permissible limit.		Date: 31/05/2025
5	WATER QUALITY MONITORING AND PRESERVATION	Water sprinkling arrangements as well as dry fog system to control fugitive emission shall be undertaken.
PPs Submission: Complied A Mobile mist canon and fixed water sprinkling system have been installed to control fugitive emission.		Date: 31/05/2025
6	AIR QUALITY MONITORING AND PRESERVATION	Tap hole emissions shall be taken to GCP system by providing proper hood and suction system.
PPs Submission: Complied Dedicated fume extraction system has been installed with bag filters for tap hole emission.		Date: 31/05/2025
7	WATER QUALITY MONITORING AND PRESERVATION	Efforts should further be made to use maximum water from the rain water harvesting sources. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources. Use of air-cooled condensers shall be explored and closed-circuit cooling system should be provided to reduce water consumption and water requirement shall be modified accordingly.
PPs Submission: Complied Presently, a fully functional roof top rainwater harvesting cum recharging around 1500 cu.m/year. New rainwater harvesting recharge pit has also been made near furnace building. A surface impoundment at the back side of the plant premises has been developed over around 1 Acre area for harvesting of rainwater. This project has been dedicated to the community in vicinity. The harvesting potential of the same is around 1200 cum/year. To reduce water consumption, close circuit cooling system is in operation.		Date: 31/05/2025
8	WATER QUALITY MONITORING AND PRESERVATION	All the effluent should be treated and used for ash handling, dust suppression and green belt development. No effluent shall be discharged, and zero discharge shall be adopted. Sanitary sewage should be treated in septic tank followed by the soak pit.
PPs Submission: Complied The plant is maintained with Zero effluent Discharge. The facility operates with 720KLD effluent treatment plant (ETP) for industrial effluent and 10KLD sewage treatment plant (STP) for domestic effluent. The treated water from both plants is utilized for dust separation and green belt development.		Date: 31/05/2025
9	WATER QUALITY MONITORING AND PRESERVATION	Regular monitoring of surface, sub-surface and ground water should be ensured and treated waste water should meet the norms prescribed by the State Pollution Control Board or described under the E(P) Act 1986 whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministrys Regional Office at Bhubaneswar, SPEB and CPCB.

PPs Submission: Complied Monitoring of surface water is carried out on a monthly basis. Similarly, ground water samples are also collected from the borewells. Sampling and analysis are carried out by an NABL Accredited laboratory. The analysis reports are also submitted to the Odisha State Pollution Control Board on monthly basis.		Date: 31/05/2025
10	WASTE MANAGEMENT	Slag produced in Ferro Manganese (Fe-Mn) production should be used in manufacture of Silico Manganese (Si-Mn). All the other Ferro alloy slag should be used in the preparation of building materials.
PPs Submission: Complied Slag produced from existing Fe-Mn plant is, partly used in the process as a raw material for Fe-Mn production and rest are sold to the Ferro Alloys Industry for making Si-Mn.		Date: 31/05/2025
11	GREENBELT	Green belt shall be developed in 33 percent of plant area. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
PPs Submission: Complied Presently, greenbelt has been developed over an area of around 15 Acres with self-sustained plantations.		Date: 31/05/2025
12	Corporate Environmental Responsibility	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants shall be implemented.
PPs Submission: Complied The applicable recommendations of CREP have been implemented.		Date: 31/05/2025
13	Corporate Environmental Responsibility	At least 5 percent of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministrys Regional Office at Chennai. Implementation of such program shall be ensured accordingly in a time bound manner.
PPs Submission: Complied All the CSR measures are carried out by the CSR wing of the company under the banner of Tata Steel Foundation. During FY Oct 2024 to March 2025 the company has spent around Rs. 6.59 Crore on the strengthening of social welfare infrastructure of the Joda valley region.		Date: 31/05/2025
14	Human Health Environment	Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking mobile toilets, mobile STP, Safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project and facilities such as fuel for cooking mobile toilets, mobile STP, Safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project
PPs Submission: Complied There are no labour camps at the Site. However, workers have access to all essential infrastructure and facilities such as toilets, STP, Safe drinking water, medical, creche, rest shelter etc.		Date: 31/05/2025
15	Risk Mitigation and Disaster Management	Risk and Disaster Management Plan along with the mitigation measures should be prepared and a copy submitted to the Ministrys Regional Office at Bhubaneswar, SPCB and CPCB within 3 months of issue of environment clearance letter.

PPs Submission: Complied Risk and disaster management plan along with the mitigation measures was submitted. Reference to our communication in this regard are as follows: a. Letter no. FAPJ/4249/2016, dated. 01.02.2016 for Central Pollution Control Board, New Delhi, b. Letter no. FAP(J)/4250/2016, dated. 01.02.2016, for the erstwhile Ministry of Environment and Forest, Eastern Regional Office, Bhubaneswar c. Letter no. FAP(J)/4251/2016, dated. 01.02.2016 to State Pollution Control Board, Bhubaneswar.	Date: 31/05/2025

General Conditions

Sr.No.	Condition Type	Condition Details
1	Statutory compliance	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC).

PPs Submission: Complied Noted	Date: 31/05/2025

2	AIR QUALITY MONITORING AND PRESERVATION	At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM10, PM2.5, SO2 and NOx are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and the SPCB/CPCB once in six months.

PPs Submission: Complied Presently four nos. ambient air monitoring stations have been installed for the monitoring of Ambient Air Quality Parameters as per National Ambient Air Quality Standard 2009. Monitoring and analysis is carried out by engaging an MoEF and CC as well as NABL Accredited laboratory. Reports are submitted to State Pollution Control Board Odisha on monthly basis.	Date: 31/05/2025

3	WATER QUALITY MONITORING AND PRESERVATION	Industrial waste water shall be properly collected, treated so as to conform to the standard prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December1993 or as amended from time to time. The treated waste water shall be utilized for plantation purpose

PPs Submission: Complied It has been followed. Treated wastewater is utilised for plantation/gardening and road water sprinkling purpose.	Date: 31/05/2025

4	Noise Monitoring & Prevention	Overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz 75 dBA (day time) and 70 dBA (night time).

PPs Submission: Complied All the Noise generating sources have been provided with requisite acoustic enclosures. Ambient Noise level is also monitored at several places inside plant premises.	Date: 31/05/2025

5	Human Health Environment	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act

PPs Submission: Complied Periodic medical check-ups were conducted yearly. Records maintained as per Orissa factory rule.	Date:

			31/05/2025
6	WATER QUALITY MONITORING AND PRESERVATION	The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	
PPs Submission: Complied Presently, a fully functional roof top rainwater harvesting cum recharging project at the administrative office with potential of rainwater harvesting is around 1500 cu.m/year. New rainwater harvesting recharge pit made near furnace building. A surface impoundment at the back side of the plant premises has been developed over around 1Acre area for harvesting of rainwater. This project has been dedicated to the community in vicinity. The harvesting potential of the same is around 1200 cum/year.			Date: 31/05/2025
7	Statutory compliance	The project authorities must strictly adhere to the stipulations made by the Odisha Pollution Control Board and the State Government.	
PPs Submission: Complied All the stipulations made by the Odisha Pollution Control Board and the State Government are strictly followed for existing facility.			Date: 31/05/2025
8	Statutory compliance	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake social- economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.	
PPs Submission: Complied Necessary Environmental Protection Measures are implemented in line with the provision of EIA/EMP report. During FY 2024-25, the company kept a budget of Rs. 108 lakhs (recurring expenses) for the Environmental Protection Measures. All the CSR measures are carried out by the CSR wing of the company under the banner of Tata Steel Foundation.			Date: 31/05/2025
9	AIR QUALITY MONITORING AND PRESERVATION	Requisite funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change (MoEFCC) as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Bhubaneswar. The funds so provided shall not be diverted for any other purpose.	
PPs Submission: Complied During FY 2024-25, the company kept a budget of Rs. 108 lakhs (recurring expenses) for the Environmental Protection Measures			Date: 31/05/2025
10	Statutory compliance	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.	
PPs Submission: Complied Already Complied. Intimation of obtaining Environmental Clearance was given to Zila Parishad vide letter No. FAPJ/4136/2015.			Date: 31/05/2025
11	Statutory compliance	The project proponent shall upload the status of compliance of the	

		stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEFCC at Bhubaneswar. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
PPs Submission: Complied The six-monthly compliance reports along with the monitoring results are uploaded in Tata Steel website www.tatasteel.com for public view and updated periodically.		Date: 31/05/2025
12	Statutory compliance	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEFCC, the respective Zonal Office of CPCB and the SPCB. The Regional Office of the Ministry at Bhubaneswar/CPCB/SPVCB shall The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEFCC, the respective Zonal Office of CPCB and the SPCB. The Regional Office of the Ministry at Bhubaneswar/CPCB/SPVCB shall monitor the stipulated conditions.
PPs Submission: Complied Six monthly compliance reports are being submitted regularly to the MoEF, its Regional Office Bhubaneswar, Central Pollution Control Board Kolkata and State Pollution Control Board.		Date: 31/05/2025
13	Statutory compliance	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MoEFCC) at Bhubaneswar by e-mail.
PPs Submission: Complied The Environment statement in Form V was submitted for the year 2023-24 on 26th Sep 2024 vide letter no.- Ref. No. FAMD/FAPJ/ 249 /FY24 to SPCB, Bhubaneswar and Regional office, Keonjhar and the compliance of environmental conditions is uploaded on the website.		Date: 31/05/2025
14	Statutory compliance	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearnces letter are available with SPCB and may also be seen at website of the Ministry of Environment, Forests and Climate Change (MoEPCC) at https://envfor.nic.in. This shall be advertise within seven days from the date of issue of the clearance letter, at least in two local newspaper that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional Office at Bhubaneswar.
PPs Submission: Complied Information regarding Environmental clearance issued is published on Sambad oriya newspaper on 13th November issue and on the statesman English Newspaper of 12th November issue.		Date: 31/05/2025
15	Statutory compliance	Project authorities shall inform the Regional Office as well as

		ministry. The date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.

PPs Submission: Complied It is being strictly followed.	Date: 31/05/2025

Visit Remarks

Last Site Visit Report Date:	N/A
Additional Remarks:	

Note: This acknowledgement is as per the details submitted by project proponent. In no way is this document to be considered as conclusion on any action on the compliance of the project. This is strictly for the project proponent's reference purpose.

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A. SPECIFIC CONDITION:

Sl. No.	Specific Condition	Compliance Status (October'2024 to March'2025)
I	The project proponent should install 24x7 air monitoring devices to monitor air emission, as provided by CPCB and submit report to Ministry and its Regional Office.	**Complied.** A continuous emission monitoring system (CEMS), including a stack analyzer, has been installed and is operational 24x7 to monitor air emissions. Monthly reports are being submitted to State Pollution Control Board Odisha. **[Annexure-1 Detailed stack Monitoring Report and CEMS photograph]**
II	Stack of adequate height & diameter with continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz, Electrostatic precipitator (ESP), bag house, bag filters etc. shall be provided to keep the emission levels below 100 mg/Nm3 and installing energy efficient technology.	**Complied.** The plant currently operates with two semi-closed electric arc furnaces, each furnace equipped with two gas cleaning plants, one of which is operational while the other serves as a standby. Each Gas Cleaning Plant (GCP) has one stack of height around 36.57 mtr above ground level with internal diameter of 0.4 mtr. The pollution control measures such as Gas Cleaning plant with venturi scrubbers are also provided with online Continuous Emission Monitoring System (CEMS). The results for emission parameters in the flue gas are observed to be well within the OSPCB prescribe limits. The stack emission parameter testing is carried out by an NABL Accredited laboratory on monthly basis. The report indicates that the emission parameters conform to the applicable permissible standards.
III	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.	**Complied.** Presently, ambient Air Quality Standard notified vide G.S.R. No. 826(E) dated 16th November 2009 is followed.
IV	Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines/Code of Practice issued by the CPCB should be followed. New standards for the sponge iron plant issued by the Ministry vide G.S.R. 414 (E) dated 30th May, 2008 should be followed.	**Complied.** In compliance with the G.S.R. 414 (E) dated 30th May 2008, gaseous and fugitive emission is controlled by mist canon, water sprinkler and DE system. As a result of these measures, fugitive dust levels when monitored were found within permissible limit.

Sl. No.	Specific Condition	Compliance Status (October'2024 to March'2025)
V	Water sprinkling arrangements as well as dry fog system to control fugitive emission shall be undertaken.	**Complied.** A Mobile mist canon and fixed water sprinkling system have been installed to control fugitive emission.
VI	Tap hole emissions shall be taken to GCP system by providing proper hood and suction system.	**Complied.** Dedicated fume extraction system has been installed with bag filters for tap hole emission.
VII	Efforts should further be made to use maximum water from the rainwater harvesting sources. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources. Use of air-cooled condensers shall be explored, and closed-circuit cooling system should be provided to reduce water consumption and water requirement shall be modified accordingly.	**Complied.** Presently, a fully functional roof top rainwater harvesting cum recharging around **1500 cu.m/year.** New rainwater harvesting recharge pit has also been made near furnace building. A surface impoundment at the back side of the plant premises has been developed over around 1 Acre area for harvesting of rainwater. This project has been dedicated to the community in vicinity. The harvesting potential of the same is around **1200 cum/year.** To reduce water consumption, close circuit cooling system is in operation.
VIII	All the effluent should be treated and used for ash handling, dust suppression and green belt development. No effluent shall be discharged, and 'zero' discharge shall be adopted. Sanitary sewage should be treated in septic tank followed by the soak pit.	**Complied.** The plant is maintained with "Zero effluent Discharge". The facility operates with 720KLD effluent treatment plant (ETP) for industrial effluent and 10KLD sewage treatment plant (STP) for domestic effluent. The treated water from both plants is utilized for dust separation and green belt development.

Sl. No.	Specific Condition	Compliance Status (October'2024 to March'2025)
IX	Regular monitoring of surface, sub-surface and ground water should be ensured, and treated wastewater should meet the norms prescribed by the State Pollution Control Board or described under the E(P) Act 1986 whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministry's Regional Office at Bhubaneswar, SPEB and CPCB.	**Complied.** Monitoring of surface water is carried out on a monthly basis. Similarly, ground water samples are also collected from the borewells. Sampling and analysis are carried out by an NABL Accredited laboratory. The analysis reports are also submitted to the Odisha State Pollution Control Board on monthly basis. **[Annexure-02 Surface and Ground water analysis report]**
X	Slag produced in Ferro Manganese (Fe-Mn) production should be used in manufacture of Silico Manganese (Si-Mn). All the other Ferro alloy slag should be used in the preparation of building materials.	**Complied.** Slag produced from existing Fe-Mn plant is, partly used in the process as a raw material for Fe-Mn production and rest are sold to the Ferro Alloys Industry for making Si-Mn.
XI	Risk and Disaster Management Plan along with the mitigation measures should be prepared and a copy submitted to the Ministry's Regional Office at Bhubaneswar, SPCB and CPCB within 3 months of issue of environment clearance letter.	**Complied.** Risk and disaster management plan along with the mitigation measures was submitted. Reference to our communication in this regard are as follows: a. Letter no. FAPJ/4249/2016, dated. 01.02.2016 for Central Pollution Control Board, New Delhi, b. Letter no. FAP(J)/4250/2016, dated. 01.02.2016, for the erstwhile Ministry of Environment & Forest, Eastern Regional Office, Bhubaneswar c. Letter no. FAP(J)/4251/2016, dated. 01.02.2016 to State Pollution Control Board, Bhubaneswar.
XII	Green belt shall be developed in 33% of plant area. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.	**Complied.** Presently, greenbelt has been developed over an area of around 15 Acres with self-sustained plantations.
XIII	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants shall be implemented.	**Complied.** The applicable recommendations of CREP have been implemented.
XIV	At least 5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Chennai. Implementation of such program shall be ensured accordingly in a time bound manner.	**Complied.** All the CSR measures are carried out by the CSR wing of the company under the banner of Tata Steel Foundation. During FY Oct'2024 to March'2025 the company has spent around Rs. 6.59 Crore on the strengthening of social welfare infrastructure of the Joda valley region. **[Annexure-3 Details of CSR funds Expenditure]**

Sl. No.	Specific Condition	Compliance Status (October'2024 to March'2025)
XV	Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project	**Complied.** There are no labour camps at the Site. However, workers have access to all essential infrastructure and facilities such as toilets, STP, Safe drinking water, medical, crèche, rest shelter etc.

B. General Conditions

Sl. No.	General Condition	Compliance Status (October'2024 to March'2025)
I	The project authorities must strictly adhere to the stipulations made by the Odisha Pollution Control Board and the State Government.	**Complied.** All the stipulations made by the Odisha Pollution Control Board and the State Government are strictly followed for existing facility.
II	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	**Noted.**
III	At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM10, PM2.5, SO2 and NOx are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and the SPCB/CPCB once in six months.	**Complied.** Presently four nos. ambient air monitoring stations have been installed for the monitoring of Ambient Air Quality Parameters as per National Ambient Air Quality Standard 2009. Monitoring and analysis is carried out by engaging an MoEF&CC as well as NABL Accredited laboratory. Reports are submitted to State Pollution Control Board Odisha on monthly basis. **[Annexure-04 Monthly average Air Quality Monitoring report]**
IV	Industrial wastewater shall be properly collected, treated so as to conform to the standard prescribed under GSR 422 (E) dated 19th May 1993 and 31st December1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.	**Complied.** It has been followed. Treated wastewater is utilised for plantation/gardening and road water sprinkling purpose.
V	Overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz 75 dBA (daytime) and 70 dBA (night-time).	**Complied.** All the Noise generating sources have been provided with requisite acoustic enclosures. Ambient Noise level is also monitored at several places inside plant premises.

Sl. No.	General Condition	Compliance Status (October'2024 to March'2025)
VI	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act	**Complied.** Periodic medical check-ups were conducted yearly. Records maintained as per Orissa factory rule.
VII	The company shall develop rainwater harvesting structures to harvest the rainwater for utilization in the lean season besides recharging the ground water table.	**Complied.** Presently, a fully functional roof top rainwater harvesting cum recharging project at the administrative office with potential of rainwater harvesting is around **1500 cu.m/year.** New rainwater harvesting recharge pit made near furnace building. A surface impoundment at the back side of the plant premises has been developed over around 1Acre area for harvesting of rainwater. This project has been dedicated to the community in vicinity. The harvesting potential of the same is around **1200 cum/year.**
VIII	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake social- economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.	**Complied.** Necessary Environmental Protection Measures are implemented in line with the provision of EIA/EMP report. During FY 2024-25, the company kept a budget of Rs. 108 lakhs (recurring expenses) for the Environmental Protection Measures. All the CSR measures are carried out by the CSR wing of the company under the banner of Tata Steel Foundation.
IX	Requisite funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change (MoEFCC) as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Bhubaneswar. The funds so provided shall not be diverted for any other purpose.	**Complied.** During FY 2024-25, the company kept a budget of Rs. 108 lakhs (recurring expenses) for the Environmental Protection Measures
X	A copy of clearance letter shall be sent by the proponent to concern Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web	**Complied.** Already Complied. Intimation of obtaining Environmental Clearance was given to Zila Parishad vide letter No. FAPJ/4136/2015. [**Copy of Letter is given in Annexure-5]**

Sl. No.	General Condition	Compliance Status (October'2024 to March'2025)
	site of the company by the proponent.	
XI	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEFCC at Bhubaneswar. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely, PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	**Complied.** The six-monthly compliance reports along with the monitoring results are uploaded in Tata Steel's website www.tatasteel.com for public view and updated periodically.
XII	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEFCC, the respective Zonal Office of CPCB and the SPCB. The Regional Office of the Ministry at Bhubaneswar/CPCB/SPVCB shall monitor the stipulated conditions.	**Complied.** Six monthly compliance reports are being submitted regularly to the MoEF, its Regional Office Bhubaneswar, Central Pollution Control Board Kolkata and State Pollution Control Board.
XIII	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MoEFCC) at Bhubaneswar by e-mail.	**Complied.** The Environment statement in Form V was submitted for the year 2023-24 on 26th Sep 2024 vide letter no.- Ref. No. FAMD/FAPJ/ 249 /FY24 to SPCB, Bhubaneswar and Regional office, Keonjhar and the compliance of environmental conditions is uploaded on the website. **[Copy of Letter is given in Annexure-6]**
XIV	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearances letter are available with SPCB and may also be seen at website of the Ministry of Environment, Forests and Climate Change (MoEFCC) at https://envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspaper	**Complied.** Information regarding Environmental clearance issued is published on Sambad oriya newspaper on 13th November issue and on the statesman English Newspaper of 12th November issue. **[Details of publication are given in Annexure -7]**

Sl. No.	General Condition	Compliance Status (October'2024 to March'2025)
	that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional Office at Bhubaneswar.	
XV	Project authorities shall inform the Regional Office as well as ministry. The date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work	**Being Followed with**. It is being strictly followed.

Head,
Ferro Alloys Plant, Joda
Tata Steel Ltd.

Annexure -1

Continious Emission Monitoring System

STACK EMISSION MONITORING RESULTS (October'24 to March'25)

Months	Furnace details	PM (mg/Nm3)	SO_2 (mg/Nm3)	NOx (mg/Nm3)
Oct-24	Furnace-1	21.80	194.00	106.00
	Furnace-2	32.60	247.00	119.00
Nov-24	Furnace-1	23.90	187.00	113.00
	Furnace-2	31.70	256.00	124.00
Dec-24	Furnace-1	26.20	164.00	121.00
	Furnace-2	32.60	248.00	119.00
Jan-25	Furnace-1	27.30	158.00	116.00
	Furnace-2	31.70	261.00	124.00
Feb-25	Furnace-1	24.90	136.00	102.00
	Furnace-2	32.60	187.00	116.00
Mar-25	Furnace-1	24.90	136.00	102.00
	Furnace-2	32.60	187.00	116.00

Annexure - 01

Stack Monitoring Report

Anacon Laboratories

TC-12998

Test Report

Report No.: ALPL/30102024/1-3A **Date:** 30/10/2024 Page 1 of 1

Issued to	**TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)		**P. O. No.** 3000144107/056-19.04.2022
Sample Description/Type	Stack Emission	**Sampling by**	Anacon Representative Mr. Rahul Mazi
Sampling Location	**Stack-I**	**Sample Quantity/Packing**	Thimble: 1 X 1 No. SOx: 30 mL X 1No. PVC Bottle NOx: 30 mL X 1No. PVC Bottle
Sample Ref. No.:	ALPL/21102024/ MON--41-ST-1/2-1	**Date of Sampling**	17/10/2024
Sampling Procedure	ANtd/7.2/Mon-01	**Date of Receipt of Sample**	21/10/2024
Date of Start of Analysis	22/10/2024	**Date of Completion of Analysis**	23/10/2024

TECHNICAL DATA		
Stack Name	**Furnace**	
Ambient Temperature	26	°C
Ambient Relative Humidity	71	%
Stack height above ground level	10	Meter
Stack diameter	0.35	Meter
Type of Fuel	Coal	---
Flue gas temperature	121	°C
Flue gas velocity	7.90	m/s
Total gas quantity at STP	2738.86	m³/h
Total gas quantity at NTP	2030.64	Nm³/h

Sr. No.	Parameter	Unit	Results	Test Method
I	**Discipline:** Chemical	**Group:** Atmospheric Pollution	**Material or Product tested :** Stack Emission Monitoring	
1.	Particulate Matter	mg/Nm³	21.8	IS:11255 (Part 1)
2.	Sulphur Dioxide	mg/Nm³	194	IS 11255 (Part 2)
3.	Oxide of Nitrogen	mg/Nm³	106	IS 11255 (Part 7)

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Verified by
Snehal Raut
Technical Manager

Authorized Signatory
Chinmay Garway
Deputy Quality Manager

----End of Report----

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TC-12998

Test Report

ULR No.- TC129982400002637F
Report No.: ALPL/31122024/9-18A **Date:** 31/12/2024 Page 1 of 1

Issued to	**TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)		**P. O. No.** 3000144107/056-19.04.2022
Sample Description/Type	Stack Emission	**Sampled by**	Anacon Representative Mr. Rahul Mazi
		Sampling Method	ANtd/7.2/Mon-01
Sampling Location	**Stack-II**	**Sample Quantity/Packing**	Thimble: 1 X 1 No. SO_2: 30 mL X 1No. PVC Bottle NOx: 30 mL X 1No. PVC Bottle
Sample Ref. No.:	ALPL/25122024/MON-08-ST-1/2-2	**Date of Sampling**	23/12/2024
Sampling Procedure	ANtd/7.2/Mon-01	**Date of Receipt of Sample**	25/12/2024
Date of Start of Analysis	26/12/2024	**Date of Completion of Analysis**	27/12/2024

TECHNICAL DATA		
Stack Name	**Furnace**	
Ambient Temperature	26	°C
Ambient Relative Humidity	71	%
Stack height above ground level	10	Meter
Stack diameter	0.35	Meter
Type of Fuel	Coal	---
Flue gas temperature	124	°C
Flue gas velocity	8.21	m/s
Total gas quantity at STP	2845.73	m^3/h
Total gas quantity at NTP	2093.93	Nm^3/h

Sr. No.	Parameter	Unit	Results	Test Method
I	**Discipline:** Chemical	**Group:** Atmospheric Pollution	**Material or Product tested :** Stack Emission Monitoring	
1.	Particulate Matter	mg/Nm^3	32.6	IS:11255 (Part 1)
2.	Sulphur Dioxide	mg/Nm^3	248	IS 11255 (Part 2)
3.	Oxide of Nitrogen	mg/Nm^3	119	IS 11255 (Part 7)

NOTES: ● Please see watermark "Original Test Report" to confirm the authenticity of this report. ● Results shall be referred to tested sample(s) and applicable to tested parameters only. ● Test report shall not be reproduced except in full without prior written approval of Anacon Labs. ● **Environmental condition – Satisfactory & clear.**

Verified by
Snehal Raut
Technical Manager

Signatory
Pooja Kathane
Technical Manager

Authorized Signatory
Chinmay Garway
Deputy Quality Manager

----End of Report----

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Test Report

ULR No.-TC12998250000000482F
Report No.: ALPL/31012025/10-24A

Date: 31/01/2025

Issued to	**TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)		**P. O. No.** 3000144107/056-19.04.2022
Sample Description/Type	Stack Emission	**Sampled by**	Anacon Representative Mr. Sunil Naik
		Sampling Method	ANtd/7.2/Mon-01
Sampling Location	**Stack-I**	**Sample Quantity/Packing**	Thimble: 1 X 1 No. SO_2: 30 mL X 1No. PVC Bottle NOx: 30 mL X 1No. PVC Bottle
Sample Ref. No.:	ALPL/27012025/MON-16-ST-9/2-1	**Date of Sampling**	23/01/2025
Sampling Procedure	ANtd/7.2/Mon-01	**Date of Receipt of Sample**	27/01/2025
Date of Start of Analysis	27/01/2025	**Date of Completion of Analysis**	28/01/2025

TECHNICAL DATA		
Stack Name	Furnace	
Ambient Temperature	26	°C
Ambient Relative Humidity	71	%
Stack height above ground level	10	Meter
Stack diameter	0.35	Meter
Type of Fuel	Coal	---
Flue gas temperature	107	°C
Flue gas velocity	7.48	m/s
Total gas quantity at STP	2591.83	m^3/h
Total gas quantity at NTP	1992.42	Nm^3/h

Sr. No.	Parameter	Unit	Results	Test Method
I	**Discipline:** Chemical	**Group:** Atmospheric Pollution	**Material or Product tested :** Stack Emission Monitoring	
1.	Particulate Matter	mg/Nm^3	27.3	IS:11255 (Part 1)
2.	Sulphur Dioxide	mg/Nm^3	158	IS 11255 (Part 2)
3.	Oxide of Nitrogen	mg/Nm^3	116	IS 11255 (Part 7)

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Verified by	Signatory	Authorized Signatory
Snehal Raut Technical Manager	Pooja Kalhane Technical Manager	Chinmay Garvay Deputy Quality Manager

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Test Report

ULR No.-TC12998250000000483F
Report No.: ALPL/31012025/10-25A

Date: 31/01/2025

Issued to	**TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)		**P. O. No.** 3000144107/056-19.04.2022
Sample Description/Type	Stack Emission	**Sampled by**	Anacon Representative Mr. Sunil Naik
		Sampling Method	ANtd/7.2/Mon-01
Sampling Location	**Stack-II**	**Sample Quantity/Packing**	Thimble: 1 X 1 No. SO_2: 30 mL X 1No. PVC Bottle NOx: 30 mL X 1No. PVC Bottle
Sample Ref. No.:	ALPL/27012025/MON-16-ST-9/2-2	**Date of Sampling**	23/01/2025
Sampling Procedure	ANtd/7.2/Mon-01	**Date of Receipt of Sample**	27/01/2025
Date of Start of Analysis	27/01/2025	**Date of Completion of Analysis**	28/01/2025

TECHNICAL DATA		
Stack Name	Furnace	
Ambient Temperature	26	°C
Ambient Relative Humidity	71	%
Stack height above ground level	10	Meter
Stack diameter	0.35	Meter
Type of Fuel	Coal	---
Flue gas temperature	119	°C
Flue gas velocity	8.16	m/s
Total gas quantity at STP	2827.75	m^3/h
Total gas quantity at NTP	2107.24	Nm^3/h

Sr. No.	Parameter	Unit	Results	Test Method
I	**Discipline:** Chemical	**Group:** Atmospheric Pollution	**Material or Product tested :** Stack Emission Monitoring	
1.	Particulate Matter	mg/Nm^3	31.7	IS:11255 (Part 1)
2.	Sulphur Dioxide	mg/Nm^3	261	IS 11255 (Part 2)
3.	Oxide of Nitrogen	mg/Nm^3	124	IS 11255 (Part 7)

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Verified by
Snehal Raut
Technical Manager

Signatory
Pooja Kathane
Technical Manager

Authorized Signatory
Chinmay Garwey
Deputy Quality Manager

----*End of Report*----

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TC-12998

Test Report

ULR No.-TC129982500000970F
Report No.: ALPL/03032025/10-20A

Date: 03/03/2025

Issued to	**TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)		**P. O. No.** 3000144107/056-19.04.2022
Sample Description/Type	Stack Emission	**Sampled by**	Anacon Representative Mr. Sunil Naik
		Sampling Method	ANtd/7.2/Mon-01
Sampling Location	**Stack-I**	**Sample Quantity/Packing**	Thimble: 1 X 1 No. SO_2: 30 mL X 1No. PVC Bottle NOx: 30 mL X 1No. PVC Bottle
Sample Ref. No.:	ALPL/260225/ENV-1/18-10	**Date of Sampling**	20/02/2025
Sampling Procedure	ANtd/7.2/Mon-01	**Date of Receipt of Sample**	26/02/2025
Date of Start of Analysis	27/02/2025	**Date of Completion of Analysis**	28/02/2025

TECHNICAL DATA		
Stack Name	Furnace-1	
Ambient Temperature	26	°C
Ambient Relative Humidity	71	%
Stack height above ground level	10	Meter
Stack diameter	0.35	Meter
Type of Fuel	Coal	---
Flue gas temperature	104	°C
Flue gas velocity	7.68	m/s
Total gas quantity at STP	2661.25	m^3/h
Total gas quantity at NTP	2089.75	Nm^3/h

Sr. No.	Parameter	Unit	Results	Test Method
I	**Discipline:** Chemical	**Group:** Atmospheric Pollution	**Material or Product tested :** Stack Emission Monitoring	
1.	Particulate Matter	mg/Nm^3	24.9	IS:11255 (Part 1)
2.	Sulphur Dioxide	mg/Nm^3	136	IS 11255 (Part 2)
3.	Oxide of Nitrogen	mg/Nm^3	102	IS 11255 (Part 7)

NOTES: • Please see watermark "Original Test Report" to confirm the authenticity of this report. • Results shall be referred to tested sample(s) and applicable to tested parameters only. • Test report shall not be reproduced except in full without prior written approval of Anacon Labs. • **Environmental condition – Satisfactory & clear.**

Verified by
Snehal Raut
Technical Manager

Signatory
Pooja Kathane
Technical Manager

Authorized Signatory
Chinmay Garway
Deputy Quality Manager

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TC-12998

Test Report

ULR No.-TC129982500000971F
Report No.: ALPL/03032025/10-21A

Date: 03/03/2025

Issued to	**TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)		**P. O. No.** 3000144107/056-19.04.2022
Sample Description/Type	Stack Emission	**Sampled by**	Anacon Representative Mr. Sunil Naik
		Sampling Method	ANtd/7.2/Mon-01
Sampling Location	Stack-II	**Sample Quantity/Packing**	Thimble: 1 X 1 No. SO_2: 30 mL X 1No. PVC Bottle NOx: 30 mL X 1No. PVC Bottle
Sample Ref. No.:	ALPL/260225/ENV-1/18-11	**Date of Sampling**	19/02/2025
Sampling Procedure	ANtd/7.2/Mon-01	**Date of Receipt of Sample**	26/02/2025
Date of Start of Analysis	27/02/2025	**Date of Completion of Analysis**	28/02/2025

TECHNICAL DATA		
Stack Name	Furnace-2	
Ambient Temperature	26	°C
Ambient Relative Humidity	71	%
Stack height above ground level	10	Meter
Stack diameter	0.35	Meter
Type of Fuel	Coal	—
Flue gas temperature	116	°C
Flue gas velocity	9.21	m/s
Total gas quantity at STP	3190.55	m^3/h
Total gas quantity at NTP	2428.10	Nm^3/h

Sr. No.	Parameter	Unit	Results	Test Method
I	**Discipline:** Chemical	**Group:** Atmospheric Pollution	**Material or Product tested :** Stack Emission Monitoring	
1.	Particulate Matter	mg/Nm^3	32.6	IS:11255 (Part 1)
2.	Sulphur Dioxide	mg/Nm^3	187	IS 11255 (Part 2)
3.	Oxide of Nitrogen	mg/Nm^3	116	IS 11255 (Part 7)

NOTES: • Please see watermark "Original Test Report" to confirm the authenticity of this report. • Results shall be referred to tested sample(s) and applicable to tested parameters only. • Test report shall not be reproduced except in full without prior written approval of Anacon Labs. • Environmental condition – Satisfactory & clear.

Verified by
Snehal Raut
Technical Manager

Signatory
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Technical Manager

Authorized Signatory
Chinmay Garway
Deputy Quality Manager

----*End of Report*----

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Test Report

Report No.: ALPL/03032025/10-22B **Date:** 03/03/2025 Page 1 of 1

Issued to	**TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)		**P. O. No.** 3000144107/056-19.04.2022
Sample Description/Type	Stack Emission	**Sampled by**	Anacon Representative Mr. Sunil Naik
		Sampling Method	ANtd/7.2/Mon-01
Sampling Location	**DG-1** **(400 kVA)**	**Sample Quantity/Packing**	Thimble: 1 X 1 No. SO_2: 30 mL X 1No. PVC Bottle NOx: 30 mL X 1No. PVC Bottle
Sample Ref. No.:	ALPL/260225/ENV-1/18-12	**Date of Sampling**	20/02/2025
Sampling Procedure	ANtd/7.2/Mon-01	**Date of Receipt of Sample**	26/02/2025
Date of Start of Analysis	27/02/2025	**Date of Completion of Analysis**	28/02/2025

Stack details:		
Stack Identity	DG-1	--
Stack attached to	400 kVA DG	--
Material of construction	MS	--
Stack Height	3.5	Meter
Stack diameter	0.10	Meter
Type of Fuel	HSD	--
Flue gas temperature	136	°C
Flue gas velocity	12.58	m/s
Total gas quantity	355.26	m^3/h
Total gas quantity at NTP	257.16	Nm^3/h

Sr. No.	Parameter	Unit	Result	Norms	Test Method
1.	Total Particulate Matter (PM)	gm/kw-hr	0.073	≤ 0.2	IS:11255 (Part 1)
2.	Sulphur Dioxide (SO_2)	gm/kw-hr	0.004	--	IS 11255 (Part 2)
3.	Oxide of Nitrogen (NO_x)	gm/kw-hr	0.871	≤ 4.0	IS 11255 (Part 7)
4.	Hydrocarbon (HC)	gm/kw-hr	1.193		Gas Analyser
5.	Carbon Monoxide (CO)	gm/kw-hr	1.674	≤ 3.5	Gas Analyser

NOTES: • Please see watermark "Original Test Report" to confirm the authenticity of this report. • Results shall be referred to tested sample(s) and applicable to tested parameters only. • Test report shall not be reproduced except in full without prior written approval of Anacon Labs.

Remark: - All Results are within Limit as per Norms.

Verified by	Signatory	Authorized Signatory
Snehal Raut Technical Manager	Pooja Kalhane Technical Manager	Chinmay Garway Deputy Quality Manager

----*End of Report*----

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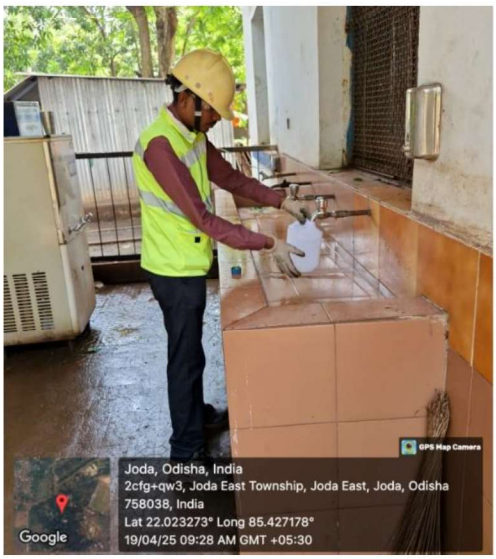
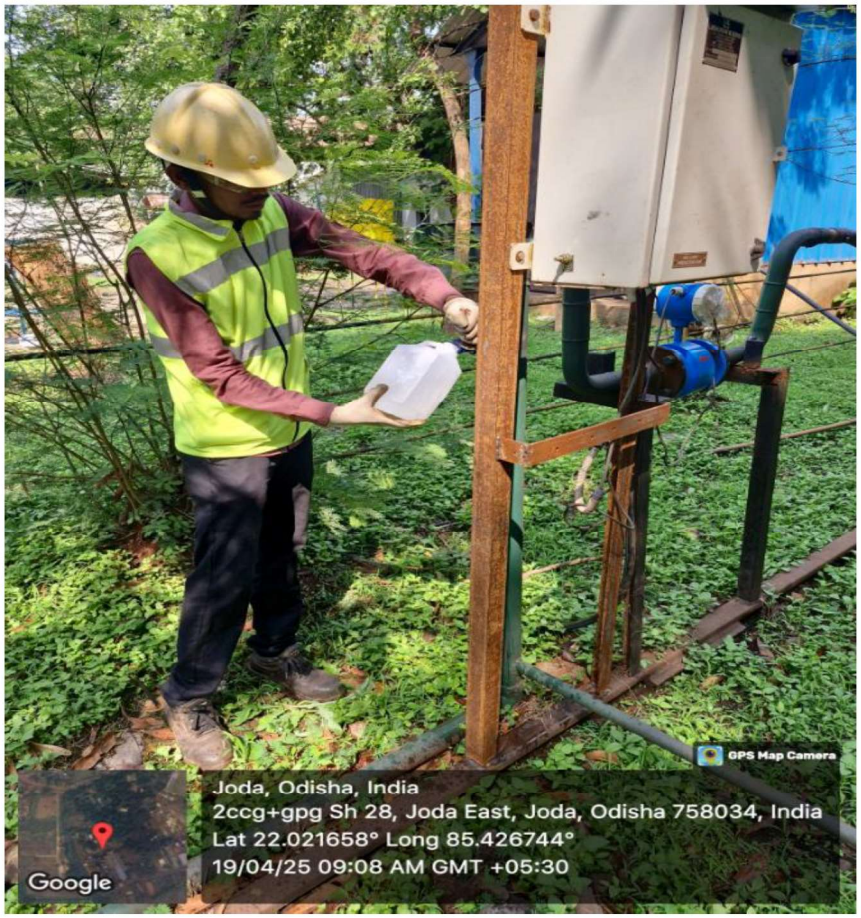
Annexure – 02

(Water Sample Collections from Different Location)





Anacon Laboratories

TC-12998

Test Report

ULR No.- TC129982400001902F

Test Report No. : ALPL/30102024/1-7A dated 30/10/2024

Page 1 of 2

Issued To : **TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	**Sample Inward No.** ALPL/21102024/MON-41-W-1/4-1 **Inward Date** 21/10/2024 **Reference** W.O.- 3000144107/056-19.04.2022		**Analysis Start** 22/10/2024 **Analysis End** 28/10/2024 **Report Issue Date** 30/10/2024
Sample Name Drinking Water	**Purpose of Analysis** Drinking	**Sample Condition** Sealed & Ice Preserved	**Quantity Received** 5.0 Ltr & 250 ml
Sampling by Anacon Representative Mr. Rahul Mazi	**Sampling Date** 18/10/2024	**Sampling Time** 12.40 pm	**Sampling Location / Source** Canteen / R.O.Water

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
I	**Discipline : Biological**		**Group : Water**	**Material or Product tested: Drinking water**		
1	Coliform	Per 100 ml	IS 15185	Absent	Absent	Absent
2	*Escherichia coli*	Per 100 ml	IS 15185	Absent	Absent	Absent
II	**Discipline : Chemical**		**Group : Water**	**Material or Product tested: Drinking water**		
3	pH value	-	IS 3025 (Part 11)	6.5 to 8.5	No relaxation	6.93
4	Turbidity	NTU	IS 3025 : (Part 10)	1	5	BLQ (LOQ-0.1)
5	Total dissolved solids	mg/l	IS 3025 (Part 16)	500	2000	164
6	Total Alkalinity (as Calcium Carbonate)	mg/l	IS 3025 (Part 23)	200	600	116.53
7	Total hardness (as $CaCO_3$)	mg/l	IS 3025 (Part 21) Clause 5	200	600	110.25
8	Calcium (as Ca)	mg/l	IS 3025 (Part 40) Clause 5	75	200	28.46
9	Magnesium (as Mg)	mg/l	IS 3025 (Part 46) Clause 6	30	100	9.52
10	Sulphate (as SO_4)	mg/l	IS 3025 (Part 24/ Sec1) Clause 5	200	400	2.81
11	Nitrate (as NO_3)	mg/l	APHA 23rd edition: Method 4500-NO3	45	No relaxation	BLQ (LOQ-2)
12	Chloride (as Cl)	mg/l	IS 3025 (Part 32) Clause 2	250	1000	17.31
13	Fluoride (as F)	mg/l	IS 3025 (Part 60) Clause 6	1.0	1.5	BLQ (LOQ-0.1)
14	Phenolic compounds	mg/l	IS 3025 (Part 43/Sec 1) Clause 6	0.001	0.002	BLQ (LOQ-0.001)

NOTE: ● Please see watermark "Original Test Report" to confirm the authenticity of this report. ● Results shall be referred to tested sample(s) and applicable to tested parameters only. ● Test report shall not be reproduced except in full without prior written approval of Anacon Labs. ● Liability of Anacon Labs is limited to invoiced amount only. ● Non-perishable and perishable sample(s) shall be disposed off after 30 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. ● #Permissible limit in absence of an alternate source for drinking water. ● 'mg/l' is equivalent to 'ppm'. ● 'µg/l' is equivalent to 'ppb'. ● **BLQ= below limit of quantification , LOQ= limit of quantification.** ● **Sampling Method-ANtd/7.2/MON-01** ● **Environmental condition** – Satisfactory. ● **Statement of conformity issued on the basis of decision rule as per quality procedure (QP/7.8/05).** ● **pH Value was measured at 25°C.**

Verified by

Snehal Raut
Technical Manager

Authorized Signatories

Pooja Kathane
Technical Manager

Chinmay Garway
Deputy Quality Manager

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TC-12998

Test Report

ULR No.- TC129982400001902F

Test Report No. : ALPL/30102024/1-7A dated 30/10/2024

Page 2 of 2

Issued To : **TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	**Sample Inward No.** ALPL/21102024/MON-41-W-1/4-1 **Inward Date** 21/10/2024 **Reference** W.O.- 3000144107/056-19.04.2022		**Analysis Start** 22/10/2024 **Analysis End** 28/10/2024 **Report Issue Date** 30/10/2024
Sample Name Drinking Water	**Purpose of Analysis** Drinking	**Sample Condition** Sealed & Ice Preserved	**Quantity Received** 5.0 Ltr & 250 ml
Sampling by Anacon Representative Mr. Rahul Mazi	**Sampling Date** 18/10/2024	**Sampling Time** 12.40 pm	**Sampling Location / Source** Canteen / R.O.Water

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
III	**Discipline : Chemical**	**Group : Residues and contaminants in water**			**Material or Product tested: Drinking water**	
15	Aluminium (as Al)	mg/l	IS 3025 (Part 2)	0.03	0.2	BLQ (LOQ-0.02)
16	Boron (as B)	mg/l	IS 3025 (Part 2)	0.5	2.4	BLQ (LOQ-0.02)
17	Mercury (as Hg)	mg/l	Antr/7.2/Res.Inorg/01	0.001	No relaxation	BLQ (LOQ-0.001)
18	Iron (as Fe)	mg/l	IS 3025 (Part 2)	1.0	No relaxation	0.07
19	Copper (as Cu)	mg/l	IS 3025 (Part 2)	0.05	1.5	BLQ (LOQ-0.02)
20	Manganese (as Mn)	mg/l	IS 3025 (Part 2)	0.1	0.3	BLQ (LOQ-0.02)
21	Lead (as Pb)	mg/l	IS 3025 (Part 2)	0.01	No relaxation	BLQ (LOQ-0.01)
22	Zinc (as Zn)	mg/l	IS 3025 (Part 2)	5	15	BLQ (LOQ-0.02)
23	Nickel (as Ni)	mg/l	IS 3025 (Part 2)	0.02	No relaxation	BLQ (LOQ-0.01)
24	Total Chromium (as Cr)	mg/l	IS 3025 (Part 2)	0.05	No relaxation	BLQ (LOQ-0.02)

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REMARKS: As requested by the client, sample was tested for above parameters only. The submitted sample complies with requirement as per IS: 10500:2012, for tests conducted only.

Verified By

Pradnya Pillewan
Deputy Technical Manager

Authorized Signatory

Chinmay Garway
Deputy Quality Manager

-----End of Report-----

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TC-12998

Test Report

ULR No.- TC129982400001904F
Test Report No. : ALPL/30102024/1-9A dated: 30/10/2024 Page 1 of 1

Issued To : **TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	**Sample Inward No.** ALPL/21102024/MON-41-W-1/4-3 **Inward Date** 21/10/2024 **Work Order No.** 3000144107/056-19.04.2022		**Analysis Start** 22/10/2024 **Analysis End** 28/10/2024 **Report Issue Date** 30/10/2024
Sample Name Ground Water	**Purpose of Analysis** Drinking	**Sample Condition** Sealed & Ice Preserved	**Quantity Received** 5.0 Ltr & 250 ml
Sampling by Anacon Representative Mr. Rahul Mazi	**Sampling Date** 18/10/2024	**Sampling Time** 12.20 pm	**Sampling Location / Source** Near DG Set / Borewell

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
I	**Discipline : Chemical**		**Group : Water**	**Material or Product tested: Drinking water**		
1	pH value	-	IS 3025 (Part 11)	6.5 to 8.5	No relaxation	6.71
2	Turbidity	NTU	IS 3025 : (Part 10)	1	5	1
3	Total dissolved solids	mg/l	IS 3025 (Part 16)	500	2000	462
4	Total Alkalinity (as Calcium Carbonate)	mg/l	IS 3025 (Part 23)	200	600	173.91
5	Total hardness (as $CaCO_3$)	mg/l	IS 3025 (Part 21) Clause 5	200	600	180
6	Calcium (as Ca)	mg/l	IS 3025 (Part 40) Clause 5	75	200	52.68
7	Magnesium (as Mg)	mg/l	IS 3025 (Part 46) Clause 6	30	100	11.54
8	Sulphate (as SO_4)	mg/l	IS 3025 (Part 24/ Sec1) Clause 5	200	400	7.93
9	Nitrate (as NO_3)	mg/l	APHA 23rd edition Method 4500-NO3	45	No relaxation	4.82
10	Chloride (as Cl)	mg/l	IS 3025 (Part 32) Clause 2	250	1000	23.67
11	Fluoride (as F)	mg/l	IS 3025 (Part 60) Clause 6	1.0	1.5	0.18
12	Phenolic compounds	mg/l	IS 3025 (Part 43/Sec 1) Clause 6	0.001	0.002	BLQ (LOQ-0.001)

NOTE: ● Please see watermark "Original Test Report" to confirm the authenticity of this report.● Results shall be referred to tested sample(s) and applicable to tested parameters only. ● Test report shall not be reproduced except in full without prior written approval of Anacon Labs. ● Liability of Anacon Labs is limited to invoiced amount only. ● Non-perishable and perishable sample(s) shall be disposed off after 30 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. ● #Permissible limit in absence of an alternate source for drinking water. ● 'mg/l' is equivalent to 'ppm'. ● 'µg/l' is equivalent to 'ppb'. ● **BLQ= below limit of quantification , LOQ= limit of quantification.** ● **Environmental condition** – Satisfactory. ● **Statement of conformity issued on the basis of decision rule as per quality procedure (QP/7.8.05).** ● **pH Value was measured at 25°C.**

REMARKS: As requested by the client, sample was tested for above parameters only. The submitted sample complies with requirement as per IS: 10500:2012, for tests conducted only.

Verified By
Snehal Raut
Technical Manager

Authorized Signatory
Y Chinmay Garway
Deputy Quality Manager

-----End of Report-----

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Test Report

Test Report No. : ALPL/30102024/1-9B dated: 30/10/2024 Page 1 of 1

Issued To : **TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	**Sample Inward No.** ALPL/21102024/MON-41-W-1/4-3 **Inward Date** 21/10/2024 **Work Order No.** 3000144107/056-19.04.2022		**Analysis Start** 22/10/2024 **Analysis End** 28/10/2024 **Report Issue Date** 30/10/2024
Sample Name Ground Water	**Purpose of Analysis** Drinking	**Sample Condition** Sealed & Ice Preserved	**Quantity Received** 5.0 Ltr & 250 ml
Sampling by Anacon Representative Mr. Rahul Mazi	**Sampling Date** 18/10/2024	**Sampling Time** 12.20 pm	**Sampling Location / Source** Near DG Set / Borewell

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
I	**Discipline : Biological**		**Group : Water**	**Material or Product tested: Drinking water**		
1	Coliform	Per 100 ml	IS 15185	Absent	Absent	Absent
2	*Escherichia Coli*	Per 100 ml	IS 15185	Absent	Absent	Absent
II	**Discipline : Chemical**		**Group : Water**	**Material or Product tested: Drinking water**		
3	Electrical Conductivity at 25°C	µs/cm	IS 3025 (Part 14)	--	--	341
4	Total Suspended Solids	mg/l	IS 3025 (Part 17)	--	--	BLQ (LOQ-10)
III	**Discipline : Chemical**	**Group : Residues and contaminants in water**		**Material or Product tested: Drinking water**		
2	Iron (as Fe)	mg/l	IS 3025 (Part 2)	1.0	No relaxation	0.24
3	Total Chromium (as Cr)	mg/l	IS 3025 (Part 2)	0.05	No relaxation	BLQ (LOQ-0.02)
4	Copper (as Cu)	mg/l	IS 3025 (Part 2)	0.05	1.5	BLQ (LOQ-0.02)
5	Selenium (as Se)	mg/l	IS 3025 (Part 56)	0.01	No relaxation	BLQ (LOQ-0.01)
6	Arsenic (as As)	mg/l	IS 3025 (Part 2)	0.01	No relaxation	BLQ (LOQ-0.01)
7	Cadmium (as Cd)	mg/l	IS 3025 (Part 2)	0.003	No relaxation	BLQ (LOQ-0.002)
8	Mercury (as Hg)	mg/l	Antr/7.2/Res.Inorg/01	0.001	No relaxation	BLQ (LOQ-0.001)
9	Lead (as Pb)	mg/l	IS 3025 (Part 2)	0.01	No relaxation	BLQ (LOQ-0.01)
10	Zinc (as Zn)	mg/l	IS 3025 (Part 2)	5	15	BLQ (LOQ-0.02)
11	Manganese (as Mn)	mg/l	IS 3025 (Part 2)	0.1	0.3	BLQ (LOQ-0.02)

NOTE: ● Please see watermark "Original Test Report" to confirm the authenticity of this report. ● Results shall be referred to tested sample(s) and applicable to tested parameters only. ● Test report shall not be reproduced except in full without prior written approval of Anacon Labs. ● Liability of Anacon Labs is limited to invoiced amount only. ● Non-perishable and perishable sample(s) shall be disposed off after 30 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. ● #Permissible limit in absence of an alternate source for drinking water. ● 'mg/l' is equivalent to 'ppm'. ● 'µg/l' is equivalent to 'ppb'. ● **BLQ= below limit of quantification , LOQ= limit of quantification.** ● **Environmental condition** – Satisfactory. ● **Statement of conformity issued on the basis of decision rule as per quality procedure (QP/7.8/05).**

REMARKS: As requested by the client, sample was tested for above parameters only. The submitted sample complies with requirement as per IS: 10500:2012, for tests conducted only.

Verified By

Pradnya Pillewan
Deputy Technical Manager

Snehal Raut
Technical Manager

Pooja Kathane
Technical Manager

Authorized Signatory

Chinmay Garway
Deputy Quality Manager

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Test Report

Test Report No. : ALPL/30102024/1-11 dated 30/10/2024 Page 1 of 1

Issued To : **TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	**Sample Inward No.**	ALPL/21102024/MON-41-EW-1/2-1 & 2	**Analysis Start** 22/10/2024
	Inward Date	21/10/2024	**Analysis End** 28/10/2024
	Work Order No.	3000144107/056-19/04/2022	**Report Issue Date** 30/10/2024
			Sample Category Water

Sample Name	Sample Source	Sample Particulars	Sample Condition	Quantity Received
Surface Water	1. Upstream 2. Downstream	Sample Code-SW-1 & 2	Sealed & Ice Preserved	2.0 Ltr & 250 ml

Sampling by	Sampling Date	Sampling Time	Sampling Location
Anacon Representative Mr. Rahul Mazi	19/10/2024	12.50 & 1.20 pm	1. Sona River Upstream (SW-1) 2. Sona River Downstream (SW-2)

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Standards as per IS 2296:1992 Class C	Test Result SW-1	Test Result SW-2
I	**Discipline : Biological**		**Group : Water**	**Subgroup : Surface water**		
1	Coliform	/100ml	IS 15185	5000	Absent	Absent
II	**Discipline : Chemical**		**Group : Water**	**Subgroup : Surface water**		
2	pH value	-	IS 3025 (Part 11)	6.0 to 9.0	6.17at 25°C	6.36 at 25°C
3	Colour	Hazen units	IS 3025 (Part 4) Clause 4	300	21	16
4	Dissolved Oxygen	mg/l	IS 3025 (Part 38)	4.0	6.7	6.4
5	Total Suspended Solid (as TSS)	mg/l	IS 3025 (Part 17)	--	26	18
6	BOD (3 days at 27°C)	mg/l	IS-3025 (Part 44)	3.0	2.73	2.58
7	Chemical oxygen demand	mg/l	IS-3025(Part-58)	--	8.91	7.64
8	Total Dissolved Solids (TDS)	mg/l	IS 3025 (Part 16)	1500	1437	1297
9	Copper (as Cu)	mg/l	IS 3025 (Part 2)	1.5	0.06	0.03
10	Chloride (as Cl)	mg/l	IS 3025 (Part 32) Clause 2	600	173	164
11	Sulphate (as SO_4)	mg/l	IS 3025 (Part 24/ Sec1) Clause 5	400	209	182
12	Nitrate (as NO_3)	mg/l	APHA 23rd edition: Method 4500-NO3	50	24.73	18.76
13	Fluoride (as F)	mg/l	IS 3025 (Part 60) Clause	1.5	0.61	0.58
14	Cyanide (as CN)	mg/l	IS 3025 (Part 27/Sec 1) Clause 5	0.05	BLQ (LOQ-0.005)	BLQ (LOQ-0.005)
15	Phenolic compounds	mg/l	IS 3025 (Part 43/Sec 1) Clause 6	0.005	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
16	Anionic Detergents (as MBAS)	mg/l	IS 13428 : (Annex K)	1.0	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
III	**Discipline : Chemical**		**Group : Residues and contaminants in water**		**Subgroup : Trace metal elements**	
17	Iron (as Fe)	mg/l	IS 3025 (Part 2)	0.5	0.42	0.39
18	Cadmium (as Cd)	mg/l	IS 3025 (Part 2)	0.01	BLQ (LOQ-0.002)	BLQ (LOQ-0.002)
19	Selenium (as Se)	mg/l	IS 3025 (Part 56)	0.05	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
20	Arsenic (as As)	mg/l	IS 3025 (Part 37)	0.2	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
21	Lead (as Pb)	mg/l	3025 (Part 2)	0.1	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
22	Zinc (as Zn)	mg/l	IS 3025 (Part 2)	15	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
23	Hexa Chromium (as Cr^{+6})	mg/l	IS 3025 (Part 52)	0.05	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
24	Mercury (as Hg)	mg/l	IS : 3025 (Part 48)	--	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
25	Manganese (as Mn)	mg/l	IS 3025 (Part 2)	--	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)

NOTES: ● Please see watermark "Original Test Report" to confirm the authenticity of this report. ● Results shall be referred to tested sample(s) and applicable to tested parameters only. ● Test report shall not be reproduced except in full without prior written approval of Anacon Labs. ● Liability of Anacon Labs is limited to invoiced amount only. ● Non-perishable and perishable sample(s) shall be disposed off after 30 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. ● 'mg/l' is equivalent to 'ppm'. ● **BLQ= below limit of quantification , LOQ= limit of quantification.**

REMARKS : As requested by the client, sample was tested for above parameters only.

Verified By

Pradnya Pillewan
Deputy Technical Manager

Snehal Raut
Technical Manager

Authorized Signatories

Pooja Kathane
Technical Manager

Chinmay Garway
Deputy Quality Manager

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Test Report

Test Report No. : ALPL/30112024/9-9 dated 30/11/2024 Page 1 of 1

Issued To : **TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	**Sample Inward No.** ALPL/25112024/MON-41-EW-9/2-1 & 2 **Inward Date** 25/11/2024 **Work Order No.** 3000144107/056-19/04/2022	**Analysis Start** 25/11/2024 **Analysis End** 30/11/2024 **Report Issue Date** 30/11/2024 **Sample Category** Water	

Sample Name	Sample Source	Sample Particulars	Sample Condition	Quantity Received
Surface Water	1. Upstream 2. Downstream	Sample Code-SW-1 & 2	Sealed & Ice Preserved	2.0 Ltr & 250 ml

Sampled by	Sampling Date	Sampling Time	Sampling Location
Anacon Representative Mr. Rahul Mazi	23/11/2024	11.55 am & 12.35 pm	1. Sona River Upstream (SW-1) 2. Sona River Downstream (SW-2)

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Standards as per IS 2296:1992 Class C	Test Result SW-1	Test Result SW-2
I	**Discipline : Biological**		**Group : Water**	**Subgroup : Surface water**		
1	Coliform	/100ml	IS 15185	5000	Absent	Absent
II	**Discipline : Chemical**		**Group : Water**	**Subgroup : Surface water**		
2	pH value	-	IS 3025 (Part 11)	6.0 to 9.0	6.26at 25°C	6.51 at 25°C
3	Colour	Hazen units	IS 3025 (Part 4) Clause 4	300	18	14
4	Dissolved Oxygen	mg/l	IS 3025 (Part 38)	4.0	6.8	6.3
5	Total Suspended Solid (as TSS)	mg/l	IS 3025 (Part 17)	--	26	21
6	BOD (3 days at 27°C)	mg/l	IS-3025 (Part 44)	3.0	2.57	2.43
7	Chemical oxygen demand	mg/l	IS-3025(Part-58)	--	7.93	6.82
8	Total Dissolved Solids (TDS)	mg/l	IS 3025 (Part 16)	1500	1381	1294
9	Copper (as Cu)	mg/l	IS 3025 (Part 2)	1.5	0.07	0.04
10	Chloride (as Cl)	mg/l	IS 3025 (Part 32) Clause 2	600	168	152
11	Sulphate (as SO_4)	mg/l	IS 3025 (Part 24/ Sec1) Clause 5	400	216	194
12	Nitrate (as NO_3)	mg/l	APHA 23rd edition: Method 4500-NO3	50	21.92	18.36
13	Fluoride (as F)	mg/l	IS 3025 (Part 60) Clause	1.5	0.57	0.46
14	Cyanide (as CN)	mg/l	IS 3025 (Part 27/Sec 1) Clause 5	0.05	BLQ (LOQ-0.005)	BLQ (LOQ-0.005)
15	Phenolic compounds	mg/l	IS 3025 (Part 43/Sec 1) Clause 6	0.005	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
16	Anionic Detergents (as MBAS)	mg/l	IS 13428 : (Annex K)	1.0	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
III	**Discipline : Chemical**		**Group : Residues and contaminants in water**		**Subgroup : Trace metal elements**	
17	Iron (as Fe)	mg/l	IS 3025 (Part 2)	0.5	0.43	0.38
18	Cadmium (as Cd)	mg/l	IS 3025 (Part 2)	0.01	BLQ (LOQ-0.002)	BLQ (LOQ-0.002)
19	Selenium (as Se)	mg/l	IS 3025 (Part 56)	0.05	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
20	Arsenic (as As)	mg/l	IS 3025 (Part 37)	0.2	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
21	Lead (as Pb)	mg/l	3025 (Part 2)	0.1	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
22	Zinc (as Zn)	mg/l	IS 3025 (Part 2)	15	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
23	Hexa Chromium (as Cr^{+6})	mg/l	IS 3025 (Part 52)	0.05	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
24	Mercury (as Hg)	mg/l	IS : 3025 (Part 48)	--	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
25	Manganese (as Mn)	mg/l	IS 3025 (Part 2)	--	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)

NOTES: ● Please see watermark "Original Test Report" to confirm the authenticity of this report. ● Results shall be referred to tested sample(s) and applicable to tested parameters only. ● Test report shall not be reproduced except in full without prior written approval of Anacon Labs. ● Liability of Anacon Labs is limited to invoiced amount only. ● Non-perishable and perishable sample(s) shall be disposed off after 30 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. ● 'mg/l' is equivalent to 'ppm'. ● **BLQ= below limit of quantification , LOQ= limit of quantification.**

REMARKS : As requested by the client, sample was tested for above parameters only.

Verified By

Pradnya Pillewan
Deputy Technical Manager

Sneha Raut
Technical Manager

Authorized Signatories

Pooja Kulhane
Technical Manager

Chinmay Gurway
Deputy Quality Manager

-----End of Report-----

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TC-12998

Test Report

ULR No.- TC129982400002281F

Test Report No. : ALPL/30112024/9-5A dated 30/11/2024 Page 1 of 2

Issued To : **TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	**Sample Inward No.** ALPL/25112024/MON-41-W-9/4-1 **Inward Date** 25/11/2024 **Work Order No.** 3000144107/056-19.04.2022	**Analysis Start** 25/11/2024 **Analysis End** 30/11/2024 **Report Issue Date** 30/11/2024	

Sample Name	**Purpose of Analysis**	**Sample Condition**	**Quantity Received**
Drinking Water	Drinking	Sealed & Ice Preserved	5.0 Ltr & 250 ml
Sampled by	**Sampling Date**	**Sampling Time**	**Sampling Location / Source**
Anacon Representative Mr. Rahul Mazi	22/11/2024	11.50 am	Canteen / R.O.Water

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
I	**Discipline : Biological**		**Group : Water**	**Material or Product tested: Drinking water**		
1	Coliform	Per 100 ml	IS 15185	Absent	Absent	Absent
2	*Escherichia coli*	Per 100 ml	IS 15185	Absent	Absent	Absent
II	**Discipline : Chemical**		**Group : Water**	**Material or Product tested: Drinking water**		
3	pH value	-	IS 3025 (Part 11)	6.5 to 8.5	No relaxation	7.13
4	Turbidity	NTU	IS 3025 : (Part 10)	1	5	BLQ (LOQ-0.1)
5	Total dissolved solids	mg/l	IS 3025 (Part 16)	500	2000	158
6	Total Alkalinity (as Calcium Carbonate)	mg/l	IS 3025 (Part 23)	200	600	104.92
7	Total hardness (as $CaCO_3$)	mg/l	IS 3025 (Part 21) Clause 5	200	600	101.37
8	Calcium (as Ca)	mg/l	IS 3025 (Part 40) Clause 5	75	200	26.57
9	Magnesium (as Mg)	mg/l	IS 3025 (Part 46) Clause 6	30	100	8.51
10	Sulphate (as SO_4)	mg/l	IS 3025 (Part 24/ Sec1) Clause 5	200	400	2.64
11	Nitrate (as NO_3)	mg/l	APHA 23rd edition: Method 4500-NO3	45	No relaxation	BLQ (LOQ-2)
12	Chloride (as Cl)	mg/l	IS 3025 (Part 32) Clause 2	250	1000	16.93
13	Fluoride (as F)	mg/l	IS 3025 (Part 60) Clause 6	1.0	1.5	BLQ (LOQ-0.1)
14	Phenolic compounds	mg/l	IS 3025 (Part 43/Sec 1) Clause 6	0.001	0.002	BLQ (LOQ-0.001)

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Verified by

Snehal Raut
Technical Manager

Authorized Signatories

Pooja Kathane
Technical Manager

Chinmay Garway
Deputy Quality Manager

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TC-12998

Test Report

ULR No.- TC129982400002281F

Test Report No. : ALPL/30112024/9-5A dated 30/11/2024

Page 2 of 2

Issued To : **TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	**Sample Inward No.** ALPL/25112024/MON-41-W-9/4-1 **Inward Date** 25/11/2024 **Work Order No.** 3000144107/056-19.04.2022		**Analysis Start** 25/11/2024 **Analysis End** 30/11/2024 **Report Issue Date** 30/11/2024
Sample Name Drinking Water	**Purpose of Analysis** Drinking	**Sample Condition** Sealed & Ice Preserved	**Quantity Received** 5.0 Ltr & 250 ml
Sampled by Anacon Representative Mr. Rahul Mazi	**Sampling Date** 22/11/2024	**Sampling Time** 11.50 am	**Sampling Location / Source** Canteen / R.O.Water

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
III	**Discipline : Chemical**	**Group : Residues and contaminants in water**			**Material or Product tested: Drinking water**	
15	Aluminium (as Al)	mg/l	IS 3025 (Part 2)	0.03	0.2	BLQ (LOQ-0.02)
16	Boron (as B)	mg/l	IS 3025 (Part 2)	0.5	2.4	BLQ (LOQ-0.02)
17	Mercury (as Hg)	mg/l	Antr/7.2/Res.Inorg/01	0.001	No relaxation	BLQ (LOQ-0.001)
18	Iron (as Fe)	mg/l	IS 3025 (Part 2)	1.0	No relaxation	0.06
19	Copper (as Cu)	mg/l	IS 3025 (Part 2)	0.05	1.5	BLQ (LOQ-0.02)
20	Manganese (as Mn)	mg/l	IS 3025 (Part 2)	0.1	0.3	BLQ (LOQ-0.02)
21	Lead (as Pb)	mg/l	IS 3025 (Part 2)	0.01	No relaxation	BLQ (LOQ-0.01)
22	Zinc (as Zn)	mg/l	IS 3025 (Part 2)	5	15	BLQ (LOQ-0.02)
23	Nickel (as Ni)	mg/l	IS 3025 (Part 2)	0.02	No relaxation	BLQ (LOQ-0.01)
24	Total Chromium (as Cr)	mg/l	IS 3025 (Part 2)	0.05	No relaxation	BLQ (LOQ-0.02)

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REMARKS: As requested by the client, sample was tested for above parameters only. **The submitted sample complies with requirement as per IS: 10500:2012, for tests conducted only.**

Verified By

Pradnya Pillewan
Deputy Technical Manager

Authorized Signatory

Chinmay Garway
Deputy Quality Manager

-----End of Report-----

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TC-12998

Test Report

ULR No.- TC129982400002283F
Test Report No. : ALPL/30112024/9-7A dated: 30/11/2024

Page 1 of 1

Issued To : **TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	**Sample Inward No.** ALPL/25112024/MON-4I-W-9/4-3 **Inward Date** 25/11/2024 **Work Order No.** 3000144107/056-19.04.2022		**Analysis Start** 25/11/2024 **Analysis End** 30/11/2024 **Report Issue Date** 30/11/2024
Sample Name Ground Water	**Purpose of Analysis** Drinking	**Sample Condition** Sealed & Ice Preserved	**Quantity Received** 5.0 Ltr & 250 ml
Sampled by Anacon Representative Mr. Rahul Mazi	**Sampling Date** 22/11/2024	**Sampling Time** 3.10 pm	**Sampling Location / Source** Near DG Set / Borewell

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
I	**Discipline : Chemical**		**Group : Water**	**Material or Product tested: Drinking water**		
1	pH value	-	IS 3025 (Part 11)	6.5 to 8.5	No relaxation	7.94
2	Turbidity	NTU	IS 3025 : (Part 10)	1	5	1
3	Total dissolved solids	mg/l	IS 3025 (Part 16)	500	2000	472
4	Total Alkalinity (as Calcium Carbonate)	mg/l	IS 3025 (Part 23)	200	600	184.27
5	Total hardness (as $CaCO_3$)	mg/l	IS 3025 (Part 21) Clause 5	200	600	178
6	Calcium (as Ca)	mg/l	IS 3025 (Part 40) Clause 5	75	200	48.21
7	Magnesium (as Mg)	mg/l	IS 3025 (Part 46) Clause 6	30	100	13.58
8	Sulphate (as SO_4)	mg/l	IS 3025 (Part 24/ Sec1) Clause 5	200	400	6.72
9	Nitrate (as NO_3)	mg/l	APHA 23rd edition: Method 4500-NO3	45	No relaxation	4.26
10	Chloride (as Cl)	mg/l	IS 3025 (Part 32) Clause 2	250	1000	27.43
11	Fluoride (as F)	mg/l	IS 3025 (Part 60) Clause 6	1.0	1.5	0.16
12	Phenolic compounds	mg/l	IS 3025 (Part 43/Sec 1) Clause 6	0.001	0.002	BLQ (LOQ-0.001)

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REMARKS: As requested by the client, sample was tested for above parameters only. **The submitted sample complies with requirement as per IS: 10500:2012, for tests conducted only.**

Verified By
Snehal Raut
Technical Manager

Authorized Signatory
Chinmay Garway
Deputy Quality Manager

-----End of Report-----

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Test Report

Test Report No. : ALPL/30112024/9-7B dated: 30/11/2024

Page 1 of 1

Issued To : **TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	**Sample Inward No.** ALPL/25112024/MON-41-W-9/4-3 **Inward Date** 25/11/2024 **Work Order No.** 3000144107/056-19.04.2022		**Analysis Start** 25/11/2024 **Analysis End** 30/11/2024 **Report Issue Date** 30/11/2024
Sample Name Ground Water	**Purpose of Analysis** Drinking	**Sample Condition** Sealed & Ice Preserved	**Quantity Received** 5.0 Ltr & 250 ml
Sampled by Anacon Representative Mr. Rahul Mazi	**Sampling Date** 22/11/2024	**Sampling Time** 3.10 pm	**Sampling Location / Source** Near DG Set / Borewell

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
I	**Discipline : Biological**		**Group : Water**	**Material or Product tested: Drinking water**		
1	Coliform	Per 100 ml	IS 15185	Absent	Absent	Absent
2	*Escherichia Coli*	Per 100 ml	IS 15185	Absent	Absent	Absent
II	**Discipline : Chemical**		**Group : Water**	**Material or Product tested: Drinking water**		
3	Electrical Conductivity at 25°C	µs/cm	IS 3025 (Part 14)	--	--	354
4	Total Suspended Solids	mg/l	IS 3025 (Part 17)	--	--	BLQ (LOQ-10)
III	**Discipline : Chemical**	**Group : Residues and contaminants in water**		**Material or Product tested: Drinking water**		
2	Iron (as Fe)	mg/l	IS 3025 (Part 2)	1.0	No relaxation	0.21
3	Total Chromium (as Cr)	mg/l	IS 3025 (Part 2)	0.05	No relaxation	BLQ (LOQ-0.02)
4	Copper (as Cu)	mg/l	IS 3025 (Part 2)	0.05	1.5	BLQ (LOQ-0.02)
5	Selenium (as Se)	mg/l	IS 3025 (Part 56)	0.01	No relaxation	BLQ (LOQ-0.01)
6	Arsenic (as As)	mg/l	IS 3025 (Part 2)	0.01	No relaxation	BLQ (LOQ-0.01)
7	Cadmium (as Cd)	mg/l	IS 3025 (Part 2)	0.003	No relaxation	BLQ (LOQ-0.002)
8	Mercury (as Hg)	mg/l	Antr/7.2/Res.Inorg/01	0.001	No relaxation	BLQ (LOQ-0.001)
9	Lead (as Pb)	mg/l	IS 3025 (Part 2)	0.01	No relaxation	BLQ (LOQ-0.01)
10	Zinc (as Zn)	mg/l	IS 3025 (Part 2)	5	15	BLQ (LOQ-0.02)
11	Manganese (as Mn)	mg/l	IS 3025 (Part 2)	0.1	0.3	BLQ (LOQ-0.02)

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REMARKS: As requested by the client, sample was tested for above parameters only. **The submitted sample complies with requirement as per IS: 10500:2012, for tests conducted only.**

Verified By

Pradnya Pillewan
Deputy Technical Manager

Snehal Raut
Technical Manager

Authorized Signatories

Pooja Kathare
Technical Manager

Chinmay Garway
Deputy Quality Manager

-----End of Report-----

Anacon Laboratories

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TC-12998

Test Report

ULR No.- TC129982400002632F

Test Report No. : ALPL/31122024/9-19A dated 31/12/2024

Page 1 of 2

Issued To : **TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	**Sample Inward No.** ALPL/25122024/MON-08-W-1/4-1 **Inward Date** 25/12/2024 **Work Order No.** 3000144107/056-19.04.2022		**Analysis Start** 26/12/2024 **Analysis End** 31/12/2024 **Report Issue Date** 31/12/2024
Sample Description Drinking Water	**Purpose of Analysis** Drinking	**Sample Condition** Sealed & Ice Preserved	**Quantity Received** 5.0 Ltr & 250 ml
Sampled by Anacon Representative Mr. Rahul Mazi as per Sampling Method No.ANtd/7.2/MON-01	**Sampling Date** 23/12/2024	**Sampling Time** 11.30 am	**Sampling Location / Source** Canteen / R.O.Water

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
I	**Discipline : Biological**	**Group : Water**				
1	Coliform	Per 100 ml	IS 15185	Absent	Absent	Absent
2	*Escherichia coli*	Per 100 ml	IS 15185	Absent	Absent	Absent
II	**Discipline : Chemical**	**Group : Water**				
3	pH	-	IS 3025 (Part 11)	6.5 to 8.5	No relaxation	6.97
4	Turbidity	NTU	IS 3025 : (Part 10)	1	5	BLQ (LOQ-0.1)
5	Total dissolved solids	mg/l	IS 3025 (Part 16)	500	2000	162
6	Total Alkalinity (as Calcium Carbonate)	mg/l	IS 3025 (Part 23)	200	600	112.64
7	Total hardness (as $CaCO_3$)	mg/l	IS 3025 (Part 21) Clause 5	200	600	98
8	Calcium (as Ca)	mg/l	IS 3025 (Part 40) Clause 5	75	200	28.53
9	Magnesium (as Mg)	mg/l	IS 3025 (Part 46) Clause 6	30	100	6.92
10	Sulphate (as SO_4)	mg/l	IS 3025 (Part 24/ Sec1) Clause 5	200	400	3.16
11	Nitrate (as NO_3)	mg/l	APHA 23rd edition: Method 4500-NO3:	45	No relaxation	BLQ (LOQ-2)
12	Chloride (as Cl)	mg/l	IS 3025 (Part 32) Clause 2	250	1000	18.42
13	Fluoride (as F)	mg/l	IS 3025 (Part 60) Clause 6	1.0	1.5	BLQ (LOQ-0.1)
14	Phenolic compounds	mg/l	IS 3025 (Part 43/Sec 1) Clause 6	0.001	0.002	BLQ (LOQ-0.001)

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Verified by

Snehal Raut
Technical Manager

Authorized Signatories

Pooja Kathane
Technical Manager

Chinmay Garway
Deputy Quality Manager

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TC-12998

Test Report

ULR No.- TC129982400002632F

Test Report No. : ALPL/31122024/9-19A dated 31/12/2024 Page 2 of 2

Issued To : **TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	**Sample Inward No.**	ALPL/25122024/MON-08-W-1/4-1	**Analysis Start** 26/12/2024
	Inward Date	25/12/2024	**Analysis End** 31/12/2024
	Work Order No.	3000144107/056-19.04.2022	**Report Issue Date** 31/12/2024

Sample Description	Purpose of Analysis	Sample Condition	Quantity Received
Drinking Water	Drinking	Sealed & Ice Preserved	5.0 Ltr & 250 ml
Sampled by	**Sampling Date**	**Sampling Time**	**Sampling Location / Source**
Anacon Representative Mr. Rahul Mazi as per Sampling Method No.ANtd/7.2/MON-01	23/12/2024	11.30 am	Canteen / R.O.Water

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
III	Discipline : Chemical		Group : Residues and contaminants in water			
15	Aluminium (as Al)	mg/l	IS 3025 (Part 2)	0.03	0.2	BLQ (LOQ-0.02)
16	Boron (as B)	mg/l	IS 3025 (Part 2)	0.5	2.4	BLQ (LOQ-0.02)
17	Mercury (as Hg)	mg/l	Antr/7.2/Res.Inorg/01	0.001	No relaxation	BLQ (LOQ-0.001)
18	Iron (as Fe)	mg/l	IS 3025 (Part 2)	1.0	No relaxation	0.1
19	Copper (as Cu)	mg/l	IS 3025 (Part 2)	0.05	1.5	BLQ (LOQ-0.02)
20	Manganese (as Mn)	mg/l	IS 3025 (Part 2)	0.1	0.3	BLQ (LOQ-0.02)
21	Lead (as Pb)	mg/l	IS 3025 (Part 2)	0.01	No relaxation	BLQ (LOQ-0.01)
22	Zinc (as Zn)	mg/l	IS 3025 (Part 2)	5	15	BLQ (LOQ-0.02)
23	Nickel (as Ni)	mg/l	IS 3025 (Part 2)	0.02	No relaxation	BLQ (LOQ-0.01)
24	Total Chromium (as Cr)	mg/l	IS 3025 (Part 2)	0.05	No relaxation	BLQ (LOQ-0.02)

NOTE: ● Please see watermark "Original Test Report" to confirm the authenticity of this report.● Results shall be referred to tested sample(s) and applicable to tested parameters only. ● Test report shall not be reproduced except in full without prior written approval of Anacon Labs. ● Liability of Anacon Labs is limited to invoiced amount only. ● Non-perishable and perishable sample(s) shall be disposed off after 30 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. ● #Permissible limit in absence of an alternate source for drinking water. ● 'mg/l' is equivalent to 'ppm'. ● 'µg/l' is equivalent to 'ppb'. ● **BLQ= below limit of quantification , LOQ= limit of quantification.** ● **Environmental condition – Satisfactory.** ● **Statement of conformity Issued on the basis of decision rule as per quality procedure (QP/7.8/05).**

REMARKS: As requested by the client, sample was tested for above parameters only. **The submitted sample under above reference complies with requirement as per IS: 10500:2012, for tests conducted only.**

Verified By	Signatory	Authorized Signatory
Pradnya Pillewan Deputy Technical Manager	Pooja Kathane Technical Manager	Chinmay Garway Deputy Quality Manager

-----End of Report-----

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Test Report

TC-12998

ULR No.- TC129982400002652F
Test Report No. : ALPL/31122024/9-23A dated 31/12/2024 Page 1 of 1

Issued To :			
TATA STEEL LIMITED FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	Sample Inward No. Inward Date Work Order No.	ALPL/25122024/MON-45-W-9/2-1 & 2 25/12/2024 3000144107/056-19/04/2022	Analysis Start 26/12/2024 Analysis End 31/12/2024 Report Issue Date 31/12/2024 Sample Category Water

Sample Description	Sample Source	Sample Particulars	Sample Condition	Quantity Received
Surface Water	1. Upstream 2. Downstream	Sample Code-SW-1 & 2	Sealed & Ice Preserved	2.0 Ltr & 250 ml

Sampled by	Sampling Date	Sampling Time	Sampling Location
Anacon Representative Mr. Rahul Mazi	21/12/2024	12.40 & 1:20 pm	1. Sona River Upstream (SW-1) 2. Sona River Downstream (SW-2)

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Standards as per IS 2296:1992 Class C	Test Result	
					SW-1	SW-2
I		Discipline : Biological	Group : Water	Subgroup : Surface water		
1	Coliform	/100ml	IS 15185	5000	Absent	Absent
II		Discipline : Chemical	Group : Water	Subgroup : Surface water		
2	pH *	-	IS 3025 (Part 11)	6.0 to 9.0	6.47 at 25°C	6.63 at 25°C
3	Colour	Hazen units	IS 3025 (Part 4) Clause 4	300	16	12
4	Total Suspended Solid (as TSS)	mg/l	IS 3025 (Part 17)	--	28	24
5	Total Dissolved Solids (TDS)	mg/l	IS 3025 (Part 16)	1500	1351	1153
6	Copper (as Cu)	mg/l	IS 3025 (Part 2)	1.5	0.06	0.03
7	Chloride (as Cl)	mg/l	IS 3025 (Part 32) Clause 2	600	172	164
8	Sulphate (as SO_4)	mg/l	IS 3025 (Part 24/ Sec1) Clause 5	400	264	217
9	Nitrate (as NO_3)	mg/l	APHA 23rd edition: Method 4500-NO3	50	23.92	19.46
10	Fluoride (as F)	mg/l	IS 3025 (Part 60) Clause	1.5	0.47	0.38
11	Cyanide (as CN)	mg/l	IS 3025 (Part 27/Sec 1) Clause 5	0.05	BLQ (LOQ-0.005)	BLQ (LOQ-0.005)
12	Phenolic compounds	mg/l	IS 3025 (Part 43/Sec 1) Clause 6	0.005	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
13	Anionic Detergents (as MBAS)	mg/l	IS 13428 : (Annex K)	1.0	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
III	Discipline : Chemical		Group : Residues and contaminants in water	Subgroup : Trace metal elements		
14	Iron (as Fe)	mg/l	IS 3025 (Part 2)	0.5	0.46	0.42
15	Cadmium (as Cd)	mg/l	IS 3025 (Part 2)	0.01	BLQ (LOQ-0.002)	BLQ (LOQ-0.002)
16	Selenium (as Se)	mg/l	IS 3025 (Part 56)	0.05	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
17	Arsenic (as As)	mg/l	IS 3025 (Part 37)	0.2	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
18	Lead (as Pb)	mg/l	3025 (Part 2)	0.1	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
19	Zinc (as Zn)	mg/l	IS 3025 (Part 2)	15	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
20	Mercury (as Hg)	mg/l	IS : 3025 (Part 48)	--	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
21	Manganese (as Mn)	mg/l	IS 3025 (Part 2)	--	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)

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● **BLQ= below limit of quantification , LOQ= limit of quantification.**

REMARKS : As requested by the client, sample was tested for above parameters only.

Verified By **Authorized Signatories**

Pradnya Pillewan
Deputy Technical Manager

Snehal Raut
Technical Manager

Pooja Kathane
Technical Manager

Chinmay Garway
Deputy Quality Manager

-----End of Report-----

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Test Report

Test Report No. : ALPL/31122024/9-23B dated 31/12/2024 Page 1 of 1

Issued To : **TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	**Sample Inward No.** **Inward Date** **Work Order No.**	ALPL/25122024/MON-45-EW-9/2-1 & 2 25/12/2024 3000144107/056-19/04/2022	**Analysis Start** 26/12/2024 **Analysis End** 31/12/2024 **Report Issue Date** 31/12/2024 **Sample Category** Water

Sample Description	Sample Source	Sample Particulars	Sample Condition	Quantity Received
Surface Water	1. Upstream 2. Downstream	Sample Code-SW-1 & 2	Sealed & Ice Preserved	2.0 Ltr & 250 ml

Sampled by	Sampling Date	Sampling Time	Sampling Location
Anacon Representative Mr. Rahul Mazi	21/12/2024	12.40 & 1:20 pm	1. Sona River Upstream (SW-1) 2. Sona River Downstream (SW-2)

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Standards as per IS 2296:1992 Class C	Test Result SW-1	Test Result SW-2
I	**Discipline : Chemical**	**Group : Water**	**Subgroup : Surface water**			
1	Dissolved Oxygen	mg/l	IS 3025 (Part 38)	4.0	6.7	6.4
2	BOD (3 days at 27°C)	mg/l	IS-3025 (Part 44)	3.0	2.63	2.51
3	Chemical oxygen demand	mg/l	IS-3025(Part-58)	--	7.82	6.94
III	**Discipline : Chemical**	**Group : Residues and contaminants in water**		**Subgroup : Trace metal elements**		
4	Hexa Chromium (as Cr^{+6})	mg/l	IS 3025 (Part 52)	0.05	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)

NOTES: ● Please see watermark "Original Test Report" to confirm the authenticity of this report. ● Results shall be referred to tested sample(s) and applicable to tested parameters only. ● Test report shall not be reproduced except in full without prior written approval of Anacon Labs. ● Liability of Anacon Labs is limited to invoiced amount only. ● Non-perishable and perishable sample(s) shall be disposed off after 30 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. ● 'mg/l' is equivalent to 'ppm'.
● **BLQ= below limit of quantification , LOQ= limit of quantification.**

REMARKS : As requested by the client, sample was tested for above parameters only.

Verified By		Signatory	Authorized Signatory
Pradnya Pillewan Deputy Technical Manager	Snehal Raut Technical Manager	Pooja Kathane Technical Manager	Chinmay Ganvay Deputy Quality Manager

-----End of Report-----

ORIGINAL TEST REPORT

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TC-12998

Test Report

ULR No.-TC129982500000478F
Test Report No. : ALPL/31012025/10-26A dated 31/01/2025

Issued To : **TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	**Sample Inward No.** **Inward Date** **Work Order No.**	ALPL/27012025/MON-16-W-9/6-1 27/01/2025 3000144107/056-19.04.2022	**Analysis Start** 27/01/2025 **Analysis End** 31/01/2025 **Report Issue Date** 31/01/2025

Sample Description	Purpose of Analysis	Sample Condition	Quantity Received
Drinking Water	Drinking	Sealed & Ice Preserved	5.0 Ltr & 250 ml
Sampled by	**Sampling Date**	**Sampling Time**	**Sampling Location / Source**
Anacon Representative Mr. Sunil Naik as per Sampling Method No.ANtd/7.2/MON-01	24/01/2025	11.30 am	Canteen / R.O.Water

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
I	**Discipline : Biological**	**Group : Water**				
1	Coliform	Per 100 ml	IS 15185	Absent	Absent	Absent
2	*Escherichia coli*	Per 100 ml	IS 15185	Absent	Absent	Absent
II	**Discipline : Chemical**	**Group : Water**				
3	pH	-	IS 3025 (Part 11)	6.5 to 8.5	No relaxation	6.83
4	Turbidity	NTU	IS 3025 : (Part 10)	1	5	BLQ (LOQ-0.1)
5	Total dissolved solids	mg/l	IS 3025 (Part 16)	500	2000	194
6	Total Alkalinity (as Calcium Carbonate)	mg/l	IS 3025 (Part 23)	200	600	121.46
7	Total hardness (as $CaCO_3$)	mg/l	IS 3025 (Part 21) Clause 5	200	600	92
8	Calcium (as Ca)	mg/l	IS 3025 (Part 40) Clause 5	75	200	27.48
9	Magnesium (as Mg)	mg/l	IS 3025 (Part 46) Clause 6	30	100	5.73
10	Sulphate (as SO_4)	mg/l	IS 3025 (Part 24/ Sec1) Clause 5	200	400	2.81
11	Nitrate (as NO_3)	mg/l	IS 3025 (Part 34/sec 1) Clause 6.4	45	No relaxation	BLQ (LOQ-2)
12	Chloride (as Cl)	mg/l	IS 3025 (Part 32) Clause 2	250	1000	16.47
13	Fluoride (as F)	mg/l	IS 3025 (Part 60/sec 1) Clause 6	1.0	1.5	BLQ (LOQ-0.1)
14	Phenolic compounds	mg/l	IS 3025 (Part 43/Sec 1) Clause 6	0.001	0.002	BLQ (LOQ-0.001)

NOTE: ● Please see watermark 'Original Test Report' to confirm the authenticity of this report ● Results shall be referred to tested sample(s) and applicable to tested parameters only. ● Test report shall not be reproduced except in full without prior written approval of Anacon Labs. ● Liability of Anacon Labs is limited to invoiced amount only. ● Non-perishable and perishable sample(s) shall be disposed off after 30 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. ● #Permissible limit in absence of an alternate source for drinking water. ● 'mg/l' is equivalent to 'ppm'. ● 'µg/l' is equivalent to 'ppb'. ● BLQ= below limit of quantification , LOQ= limit of quantification. ● Environmental condition – Satisfactory. & clear● Statement of conformity Issued on the basis of decision rule as per quality procedure (QP/7.8/05). ● pH Value was measured at 25°C.

Verified by

Snehal Raut
Technical Manager

Authorized Signatories

Pooja Kathane
Technical Manager

Chinmay Garway
Deputy Quality Manager

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TC-12998

Test Report

ULR No.-TC1299825000000478F

Test Report No. : ALPL/31012025/10-26A dated 31/01/2025 Page 2 of 2

Issued To : **TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	**Sample Inward No.** **Inward Date** **Work Order No.**	ALPL/27012025/MON-16-W-8/6-1 27/01/2025 3000144107/056-19.04.2022	**Analysis Start** 27/01/2025 **Analysis End** 31/01/2025 **Report Issue Date** 31/01/2025

Sample Description	Purpose of Analysis	Sample Condition	Quantity Received
Drinking Water	Drinking	Sealed & Ice Preserved	5.0 Ltr & 250 ml
Sampled by	**Sampling Date**	**Sampling Time**	**Sampling Location / Source**
Anacon Representative Mr. Sunil Naik as per Sampling Method No.ANtd/7.2/MON-01	24/01/2025	11.30 am	Canteen / R.O.Water

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
III	**Discipline : Chemical**	**Group : Residues and contaminants in water**				
15	Aluminium (as Al)	mg/l	IS 3025 (Part 2)	0.03	0.2	BLQ (LOQ-0.02)
16	Boron (as B)	mg/l	IS 3025 (Part 2)	0.5	2.4	BLQ (LOQ-0.02)
17	Mercury (as Hg)	mg/l	Antr/7.2/Res.Inorg/01	0.001	No relaxation	BLQ (LOQ-0.001)
18	Iron (as Fe)	mg/l	IS 3025 (Part 2)	1.0	No relaxation	0.06
19	Copper (as Cu)	mg/l	IS 3025 (Part 2)	0.05	1.5	BLQ (LOQ-0.02)
20	Manganese (as Mn)	mg/l	IS 3025 (Part 2)	0.1	0.3	BLQ (LOQ-0.02)
21	Lead (as Pb)	mg/l	IS 3025 (Part 2)	0.01	No relaxation	BLQ (LOQ-0.01)
22	Zinc (as Zn)	mg/l	IS 3025 (Part 2)	5	15	BLQ (LOQ-0.02)
23	Nickel (as Ni)	mg/l	IS 3025 (Part 2)	0.02	No relaxation	BLQ (LOQ-0.01)
24	Total Chromium (as Cr)	mg/l	IS 3025 (Part 2)	0.05	No relaxation	BLQ (LOQ-0.02)

NOTE: ● Please see watermark 'Original Test Report' to confirm the authenticity of this report ● Results shall be referred to tested sample(s) and applicable to tested parameters only ● Test report shall not be reproduced except in full without prior written approval of Anacon Labs. ● Liability of Anacon Labs is limited to invoiced amount only. ● Non-perishable and perishable sample(s) shall be disposed off after 30 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. ● #Permissible limit in absence of an alternate source for drinking water. ● 'mg/l' is equivalent to 'ppm'. ● 'µg/l' is equivalent to 'ppb'. ● BLQ= below limit of quantification , LOQ= limit of quantification. ● Environmental condition – Satisfactory. & clear● Statement of conformity issued on the basis of decision rule as per quality procedure (QP/7.8/06). ● pH Value was measured at 25°C.

REMARKS : As requested by the client, sample was tested for above parameters only. **The submitted sample as per above sampling reference complies with requirement as per IS: 10500:2012, for tests conducted only.**

Verified By	Signatory	Authorized Signatory
Pradnya Pillewan Deputy Technical Manager	Pooja Kathane Technical Manager	Chinmay Garway Deputy Quality Manager

-----End of Report-----

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TC-12998

Test Report

ULR No.-TC1299825000000480F
Test Report No. : ALPL/31012025/10-28A dated: 31/01/2025 Page 1 of 2

Issued To : TATA STEEL LIMITED FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	Sample Inward No. / Inward Date	ALPL/27/01/2025/MON-16-W-9/6-3 27/01/2025	Analysis Start 27/01/2025 Analysis End 31/01/2025
	Work Order No.	3000144107/056-19.04.2022	Report Issue Date 31/01/2025

Sample Description	Purpose of Analysis	Sample Condition	Quantity Received
Ground Water	Drinking	Sealed & Ice Preserved	5.0 Ltr & 250 ml
Sampled by	**Sampling Date**	**Sampling Time**	**Sampling Location / Source**
Anacon Representative Mr. Sunil Naik as per Sampling Method No.ANtd/7.2/MON-01	25/01/2025	1.45 pm	Near DG Set / Borewell

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
I	Discipline : Chemical		Group : Water			
1	pH	-	IS 3025 (Part 11)	6.5 to 8.5	No relaxation	8.16
2	Turbidity	NTU	IS 3025 : (Part 10)	1	5	1
3	Total dissolved solids	mg/l	IS 3025 (Part 16)	500	2000	472
4	Total Alkalinity (as Calcium Carbonate)	mg/l	IS 3025 (Part 23)	200	600	187.36
5	Total hardness (as $CaCO_3$)	mg/l	IS 3025 (Part 21) Clause 5	200	600	178
6	Calcium (as Ca)	mg/l	IS 3025 (Part 40) Clause 5	75	200	48.39
7	Magnesium (as Mg)	mg/l	IS 3025 (Part 46) Clause 6	30	100	13.81
8	Sulphate (as SO_4)	mg/l	IS 3025 (Part 24/ Sec1) Clause 5	200	400	9.27
9	Nitrate (as NO_3)	mg/l	IS 3025 (Part 34/sec 1) Clause 6.4	45	No relaxation	4.81
10	Chloride (as Cl)	mg/l	IS 3025 (Part 32) Clause 2	250	1000	26.43
11	Fluoride (as F)	mg/l	IS 3025 (Part 60/sec 1) Clause 6	1.0	1.5	0.16
12	Phenolic compounds	mg/l	IS 3025 (Part 43/Sec 1) Clause 6	0.001	0.002	BLQ (LOQ-0.001)

□ Please refer last Page for Note and Remarks.

Verified By
Snehal Raut
Technical Manager

Signatory
Pooja Kathane
Technical Manager

Authorized Signatory
Chinmay Garwey
Deputy Quality Manager

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TC-12998

Test Report

ULR No.-TC1299825000000480F
Test Report No. : ALPL/31012025/10-28A dated: 31/01/2025 Page 2 of 2

Issued To : TATA STEEL LIMITED, FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	**Sample Inward No.** ALPL/27/01/2025/MON-16-W-9/5-3 **Inward Date** 27/01/2025 **Work Order No.** 3000144107/056-19.04.2022	**Analysis Start** 27/01/2025 **Analysis End** 31/01/2025 **Report Issue Date** 31/01/2025	

Sample Description	Purpose of Analysis	Sample Condition	Quantity Received
Ground Water	Drinking	Sealed & Ice Preserved	5.0 Ltr & 250 ml
Sampled by	**Sampling Date**	**Sampling Time**	**Sampling Location / Source**
Anacon Representative Mr. Sunil Naik as per Sampling Method No.ANtd/7.2/MON-01	25/01/2025	1.45 pm	Near DG Set / Borewell

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
II	**Discipline : Biological**		**Group : Water**			
1	Coliform	Per 100 ml	IS 15185	Absent	Absent	Absent
2	*Escherichia Coli*	Per 100 ml	IS 15185	Absent	Absent	Absent
III	**Discipline : Chemical**	**Group : Residues and contaminants in water**				
2	Iron (as Fe)	mg/l	IS 3025 (Part 2)	1.0	No relaxation	0.24
3	Total Chromium (as Cr)	mg/l	IS 3025 (Part 2)	0.05	No relaxation	BLQ (LOQ-0.02)
4	Copper (as Cu)	mg/l	IS 3025 (Part 2)	0.05	1.5	BLQ (LOQ-0.02)
5	Selenium (as Se)	mg/l	IS 3025 (Part 56)	0.01	No relaxation	BLQ (LOQ-0.01)
6	Arsenic (as As)	mg/l	IS 3025 (Part 2)	0.01	No relaxation	BLQ (LOQ-0.01)
7	Cadmium (as Cd)	mg/l	IS 3025 (Part 2)	0.003	No relaxation	BLQ (LOQ-0.002)
8	Mercury (as Hg)	mg/l	Antr/7.2/Res.Inorg/01	0.001	No relaxation	BLQ (LOQ-0.001)
9	Lead (as Pb)	mg/l	IS 3025 (Part 2)	0.01	No relaxation	BLQ (LOQ-0.01)
10	Zinc (as Zn)	mg/l	IS 3025 (Part 2)	5	15	BLQ (LOQ-0.02)
11	Manganese (as Mn)	mg/l	IS 3025 (Part 2)	0.1	0.3	BLQ (LOQ-0.02)

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REMARKS : As requested by the client, sample was tested for above parameters only. **The submitted sample as per above sampling reference complies with requirement as per IS: 10500:2012, for tests conducted only.**

Verified By

Pradnya Pillewan
Deputy Technical Manager

Snehal Raut
Technical Manager

Authorized Signatories

Pooja Kathane
Technical Manager

Chinmay Gandhay
Deputy Quality Manager

----End of Report----

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TC-12998

Test Report

ULR No.-TC1299825000000484F
Test Report No. : ALPL/31012025/10-30A dated 31/01/2025

Page 1 of 2

Issued To : TATA STEEL LIMITED FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	**Sample Inward No.** ALPL/27012025/MON-16-W-9/6-5 & 6 **Inward Date** 27/01/2025 **Work Order No.** 3000144107/056-19/04/2022	**Analysis Start** 27/01/2025 **Analysis End** 31/01/2025 **Report Issue Date** 31/01/2025 **Sample Category** Water	

Sample Description	Sample Source	Sample Particulars	Sample Condition	Quantity Received
Surface Water	1. Upstream 2. Downstream	Sample Code-SW-1 & 2	Sealed & Ice Preserved	2.0 Ltr & 250 ml

Sampled by	Sampling Date	Sampling Time	Sampling Location
Anacon Representative Mr. Sunil Naik as per Sampling Method No.ANtd/7.2/MON-01	25/01/2025	3.20 & 3.50 pm	1. Sona River Upstream (SW-1) 2. Sona River Downstream (SW-2)

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Standards as per IS 2296:1992 Class C	Test Result	
					SW-1	SW-2
I	Discipline : Biological Group : Water					
1	Coliform	/100ml	IS 15185	5000	Absent	Absent
II	Discipline : Chemical Group : Water					
2	pH	-	IS 3025 (Part 11)	6.0 to 9.0	6.42 at 25°C	6.57 at 25°C
3	Colour	Hazen units	IS 3025 (Part 4) Clause 4	300	26	18
4	Dissolved Oxygen	mg/l	IS 3025 (Part 38)	4.0	6.4	6.1
5	Total Suspended Solid (as TSS)	mg/l	IS 3025 (Part 17)	--	36	28
6	BOD (3 days at 27°C)	mg/l	IS-3025 (Part 44)	3.0	2.84	2.71
7	Chemical oxygen demand	mg/l	IS-3025(Part-58)	--	6.91	5.87
8	Total Dissolved Solids (TDS)	mg/l	IS 3025 (Part 16)	1500	1356	1146
9	Copper (as Cu)	mg/l	IS 3025 (Part 2)	1.5	0.06	0.06
10	Chloride (as Cl)	mg/l	IS 3025 (Part 32) Clause 2	600	172	164
11	Sulphate (as SO_4)	mg/l	IS 3025 (Part 24/ Sec1) Clause 5	400	253	177
12	Nitrate (as NO_3)	mg/l	IS 3025 (Part 34/sec 1) Clause 6.4	50	31.92	24.64
13	Fluoride (as F)	mg/l	IS 3025 (Part 60/sec 1) Clause 6	1.5	0.57	0.42
14	Cyanide (as CN)	mg/l	IS 3025 (Part 27/Sec 1) Clause 5	0.05	BLQ (LOQ-0.005)	BLQ (LOQ-0.005)
15	Phenolic compounds	mg/l	IS 3025 (Part 43/Sec 1) Clause 6	0.005	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
16	Anionic Detergents (as MBAS)	mg/l	IS 3025 (Part 68)	1.0	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)

Verified By

Pradnya Pillewan
Deputy Technical Manager

Snehal Raut
Technical Manager

Authorized Signatories

Pooja Kathane
Technical Manager

Chinmay Gandey
Deputy Quality Manager

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Test Report

ULR No.-TC129982500000484F
Test Report No. : ALPL/31012026/10-30A dated 31/01/2026

Page 2 of 2

Issued To : TATA STEEL LIMITED FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	Sample Inward No. ALPL/27012025/MON-16-W-9/6-5 & 6 Inward Date 27/01/2025 Work Order No. 3000144107/056-19/04/2022	Analysis Start 27/01/2025 Analysis End 31/01/2025 Report Issue Date 31/01/2025 Sample Category Water

Sample Description	Sample Source	Sample Particulars	Sample Condition	Quantity Received
Surface Water	1. Upstream 2. Downstream	Sample Code-SW-1 & 2	Sealed & Ice Preserved	2.0 Ltr & 250 ml

Sampled by	Sampling Date	Sampling Time	Sampling Location
Anacon Representative Mr. Sunil Naik as per Sampling Method No.ANb/7.2/MON-01	25/01/2025	3.20 & 3.50 pm	1. Sons River Upstream (SW-1) 2. Sons River Downstream (SW-2)

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Standards as per IS 2296:1992 Class C	Test Result	
					SW-1	SW-2
III	Discipline : Chemical		Group : Residues and contaminants in water			
17	Iron (as Fe)	mg/l	IS 3025 (Part 2)	0.5	0.43	0.38
18	Cadmium (as Cd)	mg/l	IS 3025 (Part 2)	0.01	BLQ (LOQ-0.002)	BLQ (LOQ-0.002)
19	Selenium (as Se)	mg/l	IS 3025 (Part 55)	0.05	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
20	Arsenic (as As)	mg/l	IS 3025 (Part 37)	0.2	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
21	Lead (as Pb)	mg/l	3025 (Part 2)	0.1	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
22	Zinc (as Zn)	mg/l	IS 3025 (Part 2)	15	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
23	Hexa Chromium (as Cr^{+6})	mg/l	IS 3025 (Part 52)	0.05	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
24	Mercury (as Hg)	mg/l	IS : 3025 (Part 48)	--	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
25	Manganese (as Mn)	mg/l	IS 3025 (Part 2)	--	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)

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• BLQ= below limit of quantification , LOQ= limit of quantification.
REMARKS : As requested by the client, sample was tested for above parameters only.

Verified By
Pradnya Pitlewar
Deputy Technical Manager

Signatory
Pooja Kathane
Technical Manager

Authorized Signatory
Chinmay Ganguly
Deputy Quality Manager

----End of Report----

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Test Report

ULR No.-TC129982500000972F
Test Report No. : ALPL/03032025/10-23A dated 03/03/2025 Page 1 of 2

Issued To : **TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	**Sample Inward No.** ALPL/260225/ENV-W-1/18-13 **Inward Date** 26/02/2025 **Work Order No.** 3000144107/056-19.04.2022		**Analysis Start** 27/02/2025 **Analysis End** 03/03/2025 **Report Issue Date** 03/03/2025
Sample Description Drinking Water	**Purpose of Analysis** Drinking	**Sample Condition** Sealed & Ice Preserved	**Quantity Received** 5.0 Ltr & 250 ml
Sampled by Anacon Representative Mr. Sunil Naik as per Sampling Method No.ANtd/7.2/MON-01	**Sampling Date** 21/02/2025	**Sampling Time** 2.30 pm	**Sampling Location / Source** Canteen / R.O.Water

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
I	**Discipline : Biological**	**Group : Water**				
1	Coliform	Per 100 ml	IS 15185	Absent	Absent	Absent
2	*Escherichia coli*	Per 100 ml	IS 15185	Absent	Absent	Absent
II	**Discipline : Chemical**	**Group : Water**				
3	pH	-	IS 3025 (Part 11)	6.5 to 8.5	No relaxation	6.97
4	Turbidity	NTU	IS 3025 : (Part 10)	1	5	BLQ (LOQ-0.1)
5	Total dissolved solids	mg/l	IS 3025 (Part 16)	500	2000	182
6	Total Alkalinity (as Calcium Carbonate)	mg/l	IS 3025 (Part 23)	200	600	137.39
7	Total hardness (as $CaCO_3$)	mg/l	IS 3025 (Part 21) Clause 5	200	600	82
8	Calcium (as Ca)	mg/l	IS 3025 (Part 40) Clause 5	75	200	24.73
9	Magnesium (as Mg)	mg/l	IS 3025 (Part 46) Clause 6	30	100	4.91
10	Sulphate (as SO_4)	mg/l	IS 3025 (Part 24/ Sec1) Clause 5	200	400	3.82
11	Nitrate (as NO_3)	mg/l	IS 3025 (Part 34/sec 1) Clause 6.4	45	No relaxation	BLQ (LOQ-2)
12	Chloride (as Cl)	mg/l	IS 3025 (Part 32) Clause 2	250	1000	18.24
13	Fluoride (as F)	mg/l	IS 3025 (Part 60/sec 1) Clause 6	1.0	1.5	BLQ (LOQ-0.1)
14	Phenolic compounds	mg/l	IS 3025 (Part 43/Sec 1) Clause 6	0.001	0.002	BLQ (LOQ-0.001)

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Verified by

Snehal Raut
Technical Manager

Authorized Signatories

Pooja Kathane
Technical Manager

Chinmay Garway
Deputy Quality Manager

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Test Report

ULR No.-TC129982500000972F
Test Report No. : ALPL/03032025/10-23A dated 03/03/2025 Page 2 of 2

Issued To : **TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	**Sample Inward No.** **Inward Date** **Work Order No.**	ALPL/260225/ENV-W-1/18-13 26/02/2025 3000144107/056-19.04.2022	**Analysis Start** 27/02/2025 **Analysis End** 03/03/2025 **Report Issue Date** 03/03/2025

Sample Description	Purpose of Analysis	Sample Condition	Quantity Received
Drinking Water	Drinking	Sealed & Ice Preserved	5.0 Ltr & 250 ml
Sampled by	**Sampling Date**	**Sampling Time**	**Sampling Location / Source**
Anacon Representative Mr. Sunil Naik as per Sampling Method No.ANto/7.2/MON-01	21/02/2025	2.30 pm	Canteen / R.O.Water

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
III	Discipline : Chemical		Group : Residues in water			
15	Aluminium (as Al)	mg/l	IS 3025 (Part 2)	0.03	0.2	BLQ (LOQ-0.02)
16	Boron (as B)	mg/l	IS 3025 (Part 2)	0.5	2.4	BLQ (LOQ-0.02)
17	Mercury (as Hg)	mg/l	Antr/7.2/Res.Inorg/01	0.001	No relaxation	BLQ (LOQ-0.001)
18	Iron (as Fe)	mg/l	IS 3025 (Part 2)	1.0	No relaxation	0.09
19	Copper (as Cu)	mg/l	IS 3025 (Part 2)	0.05	1.5	BLQ (LOQ-0.02)
20	Manganese (as Mn)	mg/l	IS 3025 (Part 2)	0.1	0.3	BLQ (LOQ-0.02)
21	Lead (as Pb)	mg/l	IS 3025 (Part 2)	0.01	No relaxation	BLQ (LOQ-0.01)
22	Zinc (as Zn)	mg/l	IS 3025 (Part 2)	5	15	BLQ (LOQ-0.02)
23	Nickel (as Ni)	mg/l	IS 3025 (Part 2)	0.02	No relaxation	BLQ (LOQ-0.01)
24	Total Chromium (as Cr)	mg/l	IS 3025 (Part 2)	0.05	No relaxation	BLQ (LOQ-0.02)

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REMARKS : As requested by the client, sample was tested for above parameters only. The submitted sample as per above sampling reference complies with requirement as per IS: 10500:2012, for tests conducted only.

Verified By	Signatory	Authorized Signatory
Pradnya Pillewan Deputy Technical Manager	Pooja Kathane Technical Manager	Chinmay Garway Deputy Quality Manager

----End of Report----

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Test Report

ULR No.-TC129982500000974F
Test Report No. : ALPL/03032025/10-25A dated: 03/03/2025 Page 1 of 2

Issued To : **TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	**Sample Inward No.** **Inward Date** **Work Order No.**	ALPL/260225/ENV-W-1/18-15 26/02/2025 3000144107/056-19.04.2022	**Analysis Start** 27/02/2025 **Analysis End** 03/03/2025 **Report Issue Date** 03/03/2025

Sample Description	Purpose of Analysis	Sample Condition	Quantity Received
Ground Water	Drinking	Sealed & Ice Preserved	5.0 Ltr & 250 ml
Sampled by	**Sampling Date**	**Sampling Time**	**Sampling Location / Source**
Anacon Representative Mr. Sunil Naik as per Sampling Method No.ANtd/7.2/MON-01	21/02/2025	12.25 pm	Near DG Set / Borewell

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
I	**Discipline : Chemical**		**Group : Water**			
1	pH	-	IS 3025 (Part 11)	6.5 to 8.5	No relaxation	7.96
2	Turbidity	NTU	IS 3025 : (Part 10)	1	5	0.1
3	Total dissolved solids	mg/l	IS 3025 (Part 16)	500	2000	462
4	Total Alkalinity (as Calcium Carbonate)	mg/l	IS 3025 (Part 23)	200	600	173.68
5	Total hardness (as $CaCO_3$)	mg/l	IS 3025 (Part 21) Clause 5	200	600	184
6	Calcium (as Ca)	mg/l	IS 3025 (Part 40) Clause 5	75	200	51.64
7	Magnesium (as Mg)	mg/l	IS 3025 (Part 46) Clause 6	30	100	13.47
8	Sulphate (as SO_4)	mg/l	IS 3025 (Part 24/ Sec1) Clause 5	200	400	6.31
9	Nitrate (as NO_3)	mg/l	IS 3025 (Part 34/sec 1) Clause 6.4	45	No relaxation	6.29
10	Chloride (as Cl)	mg/l	IS 3025 (Part 32) Clause 2	250	1000	27.43
11	Fluoride (as F)	mg/l	IS 3025 (Part 60/sec 1) Clause 6	1.0	1.5	0.18
12	Phenolic compounds	mg/l	IS 3025 (Part 43/Sec 1) Clause 6	0.001	0.002	BLQ (LOQ-0.001)

Please refer last Page for Note and Remarks.

Verified By	Signatory	Authorized Signatory
Sitehal Raut Technical Manager	Pooja Kathane Technical Manager	Chinmay Garway Deputy Quality Manager

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TC-12998

Test Report

ULR No.-TC129982500000974F
Test Report No. : ALPL/03032025/10-25A dated: 03/03/2025 Page 2 of 2

Issued To : TATA STEEL LIMITED FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	Sample Inward No. Inward Date Work Order No.	ALPL/260225/ENV-W-1/18-15 26/02/2025 3000144107/056-19.04.2022	Analysis Start Analysis End Report Issue Date	27/02/2025 03/03/2025 03/03/2025

Sample Description	Purpose of Analysis	Sample Condition	Quantity Received
Ground Water	Drinking	Sealed & Ice Preserved	5.0 Ltr & 250 ml
Sampled by	**Sampling Date**	**Sampling Time**	**Sampling Location / Source**
Anacon Representative Mr. Sunil Naik as per Sampling Method No.ANtd/7.2/MON-01	21/02/2025	12.25 pm	Near DG Set / Borewell

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
II	Discipline : Biological		Group : Water			
1	Coliform	Per 100 ml	IS 15185	Absent	Absent	Absent
2	*Escherichia Coli*	Per 100 ml	IS 15185	Absent	Absent	Absent
III	Discipline : Chemical	Group : Residues in water				
2	Iron (as Fe)	mg/l	IS 3025 (Part 2)	1.0	No relaxation	0.26
3	Total Chromium (as Cr)	mg/l	IS 3025 (Part 2)	0.05	No relaxation	BLQ (LOQ-0.02)
4	Copper (as Cu)	mg/l	IS 3025 (Part 2)	0.05	1.5	BLQ (LOQ-0.02)
5	Selenium (as Se)	mg/l	IS 3025 (Part 56)	0.01	No relaxation	BLQ (LOQ-0.01)
6	Arsenic (as As)	mg/l	IS 3025 (Part 2)	0.01	No relaxation	BLQ (LOQ-0.01)
7	Cadmium (as Cd)	mg/l	IS 3025 (Part 2)	0.003	No relaxation	BLQ (LOQ-0.002)
8	Mercury (as Hg)	mg/l	Antr/7.2/Res.Inorg/01	0.001	No relaxation	BLQ (LOQ-0.001)
9	Lead (as Pb)	mg/l	IS 3025 (Part 2)	0.01	No relaxation	BLQ (LOQ-0.01)
10	Zinc (as Zn)	mg/l	IS 3025 (Part 2)	5	15	BLQ (LOQ-0.02)
11	Manganese (as Mn)	mg/l	IS 3025 (Part 2)	0.1	0.3	BLQ (LOQ-0.02)

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REMARKS : As requested by the client, sample was tested for above parameters only. The submitted sample as per above sampling reference complies with requirement as per IS: 10500:2012, for tests conducted only.

Verified By

Pradnya Pillewan
Deputy Technical Manager

Sneha Raut
Technical Manager

Authorized Signatories

Pooja Kathane
Technical Manager

Chinmay Garway
Deputy Quality Manager

-----End of Report-----

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TC-12998

Test Report

ULR No.-TC129982500000976F
Test Report No. : ALPL/03032025/10-27A dated 03/03/2025

Page 1 of 2

Issued To :	Sample Inward No. / Inward Date / Work Order No.	Analysis Start / Analysis End / Report Issue Date / Sample Category
TATA STEEL LIMITED FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	ALPL/260225/ENV-W-1/16-17 & 18 26/02/2025 3000144107/056-19/04/2022	27/02/2025 03/03/2025 03/03/2025 Water

Sample Description	Sample Source	Sample Particulars	Sample Condition	Quantity Received
Surface Water	1. Upstream 2. Downstream	Sample Code-SW-1 & 2	Sealed & Ice Preserved	2.0 Ltr & 250 ml

Sampled by	Sampling Date	Sampling Time	Sampling Location
Anacon Representative Mr. Sunil Naik as per Sampling Method No.ANtd/7.2/MON-01	22/02/2025	1.15 & 1.25 pm	1. Sona River Upstream (SW-1) 2. Sona River Downstream (SW-2)

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Standards as per IS 2296:1992 Class C	Test Result	
					SW-1	SW-2
I	Discipline : Biological Group : Water					
1	Coliform	/100ml	IS 15185	5000	Absent	Absent
II	Discipline : Chemical Group : Water					
2	pH	-	IS 3025 (Part 11)	6.0 to 9.0	6.21	6.43
3	Colour	Hazen	IS 3025 (Part 4) Clause 4	300	24	17
4	Total Dissolved Solids (TDS)	mg/l	IS 3025 (Part 16)	1500	1351	1274
5	Chloride (as Cl)	mg/l	IS 3025 (Part 32) Clause 2	600	209	182
6	Sulphate (as SO_4)	mg/l	IS 3025 (Part 24/ Sec1) Clause 5	400	246	207
7	Nitrate (as NO_3)	mg/l	IS 3025 (Part 34/sec 1) Clause 6.4	50	28.47	19.53
8	Fluoride (as F)	mg/l	IS 3025 (Part 60/sec 1) Clause 6	1.5	0.46	0.42
9	Cyanide (as CN)	mg/l	IS 3025 (Part 27/Sec 1) Clause 5	0.05	BLQ (LOQ-0.005)	BLQ (LOQ-0.005)
10	Phenolic compounds	mg/l	IS 3025 (Part 43/Sec 1) Clause 6	0.005	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
11	Anionic Detergents (as MBAS)	mg/l	IS 3025 (Part 68)	1.0	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)

□ Please refer last Page for Note and Remarks.

Verified By

Snehal Raut
Technical Manager

Authorized Signatories

Pooja Kathane
Technical Manager

Chinmay Garway
Deputy Quality Manager

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Test Report

ULR No.-TC129952500000976F
Test Report No. : ALPL/03032025/10-27A dated 03/03/2025

Page 2 of 2

Issued To : TATA STEEL LIMITED FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	**Sample Inward No.** ALPL/260225/ENV-W-1/18-17 & 18 **Inward Date** 26/02/2025 **Work Order No.** 3000144107/056-19/04/2022	**Analysis Start** 27/02/2025 **Analysis End** 03/03/2025 **Report Issue Date** 03/03/2025 **Sample Category** Water	

Sample Description	Sample Source	Sample Particulars	Sample Condition	Quantity Received
Surface Water	1. Upstream 2. Downstream	Sample Code-SW-1 & 2	Sealed & Ice Preserved	2.0 Ltr & 250 ml

Sampled by	Sampling Date	Sampling Time	Sampling Location
Anacon Representative Mr. Sunil Naik as per Sampling Method No.ANld/7.2/MON-01	22/02/2025	1.15 & 1.25 pm	1. Sona River Upstream (SW-1) 2. Sona River Downstream (SW-2)

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Standards as per IS 2296:1992 Class C	Test Result	
					SW-1	SW-2
III	Discipline : Chemical			Group : Residues in water		
12	Iron (as Fe)	mg/l	IS 3025 (Part 2)	0.5	0.42	0.37
13	Cadmium (as Cd)	mg/l	IS 3025 (Part 2)	0.01	BLQ (LOQ-0.002)	BLQ (LOQ-0.002)
14	Selenium (as Se)	mg/l	IS 3025 (Part 56)	0.05	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
15	Arsenic (as As)	mg/l	IS 3025 (Part 37)	0.2	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
16	Lead (as Pb)	mg/l	3025 (Part 2)	0.1	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
17	Zinc (as Zn)	mg/l	IS 3025 (Part 2)	15	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
18	Mercury (as Hg)	mg/l	IS : 3025 (Part 48)	–	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
19	Manganese (as Mn)	mg/l	IS 3025 (Part 2)	–	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
20	Copper (as Cu)	mg/l	IS 3025 (Part 2)	1.5	0.06	0.04

NOTES: ● Please see watermark 'Original Test Report' to confirm the authenticity of this report. ● Results shall be referred to tested sample(s) and applicable to tested parameters only. ● Test report shall not be reproduced except in full without prior written approval of Anacon Labs. ● Liability of Anacon Labs is limited to invoiced amount only. ● Non-perishable and perishable sample(s) shall be disposed off after 30 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. ● 'mg/l' is equivalent to 'ppm'. ● BLQ= below limit of quantification, LOQ= limit of quantification. ● pH Value was measured at 25°C.

REMARKS : As requested by the client, the sample was tested for the above parameters only. The sample of above reference complies with requirement as per IS: 2296:1992 Class C, for tests conducted only.

Verified By	Signatory	Authorized Signatory
Pradnya Pilewan Deputy Technical Manager	Pooja Kathane Technical Manager	Chinmay Ganvay Deputy Quality Manager

—End of Report—

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TC-12998

Test Report

ULR No.-TC129982500001875F
Test Report No. : ALPL/31032025/10-18A dated 31/03/2025 Page 1 of 2

Issued To : **TATA STEEL LIMITED** FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	**Sample Inward No.** **Inward Date** **Work Order No.**	ALPL/250325/W-1/17-12 25/03/2025 3000144107/056-19.04.2022	**Analysis Start** 25/03/2025 **Analysis End** 31/03/2025 **Report Issue Date** 31/03/2025

Sample Description	Purpose of Analysis	Sample Condition	Quantity Received
Drinking Water	Drinking	Sealed & Ice Preserved	5.0 Ltr & 250 ml
Sampled by	**Sampling Date**	**Sampling Time**	**Sampling Location / Source**
Anacon Representative Mr. Sunil Naik as per Sampling Method No.ANtd/7.2/MON-01	21/03/2025	2.45 pm	Canteen / R.O.Water

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
I	Discipline : Biological	Group : Water				
1	Coliform	Per 100 ml	IS 15185	Absent	Absent	Absent
2	*Escherichia coli*	Per 100 ml	IS 15185	Absent	Absent	Absent
II	Discipline : Chemical	Group : Water				
3	pH	-	IS 3025 (Part 11)	6.5 to 8.5	No relaxation	7.16
4	Turbidity	NTU	IS 3025 : (Part 10)	1	5	BLQ (LOQ-0.1)
5	Total dissolved solids	mg/l	IS 3025 (Part 16)	500	2000	173
6	Total Alkalinity (as Calcium Carbonate)	mg/l	IS 3025 (Part 23)	200	600	141.68
7	Total hardness (as $CaCO_3$)	mg/l	IS 3025 (Part 21) Clause 5	200	600	90
8	Calcium (as Ca)	mg/l	IS 3025 (Part 40) Clause 5	75	200	26.39
9	Magnesium (as Mg)	mg/l	IS 3025 (Part 46) Clause 6	30	100	5.62
10	Sulphate (as SO_4)	mg/l	IS 3025 (Part 24/ Sec1) Clause 5	200	400	4.16
11	Nitrate (as NO_3)	mg/l	IS 3025 (Part 34/sec 1) Clause 6.4	45	No relaxation	BLQ (LOQ-2)
12	Chloride (as Cl)	mg/l	IS 3025 (Part 32) Clause 2	250	1000	17.32
13	Fluoride (as F)	mg/l	IS 3025 (Part 60/sec 1) Clause 6	1.0	1.5	BLQ (LOQ-0.1)
14	Phenolic compounds	mg/l	IS 3025 (Part 43/Sec 1) Clause 6	0.001	0.002	BLQ (LOQ-0.001)

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Verified By

Snehal Raut
Technical Manager

Authorized Signatories

Pooja Kathane
Technical Manager

Chinmay Ganjoy
Deputy Quality Manager

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Test Report

ULR No.-TC129982500001875F
Test Report No. : ALPL/31032025/10-18A dated 31/03/2025

Page 2 of 2

Issued To : TATA STEEL LIMITED FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	Sample Inward No. Inward Date Work Order No.	ALPL/250325/W-1/17-12 25/03/2025 3000144107/056-19.04.2022	Analysis Start 25/03/2025 Analysis End 31/03/2025 Report Issue Date 31/03/2025
Sample Description Drinking Water	Purpose of Analysis Drinking	Sample Condition Sealed & Ice Preserved	Quantity Received 5.0 Ltr & 250 ml
Sampled by Anacon Representative Mr. Sunil Naik as per Sampling Method No.ANtd/7.2/MON-01	Sampling Date 21/03/2025	Sampling Time 2.45 pm	Sampling Location / Source Canteen / R.O.Water

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
III	Discipline : Chemical		Group : Residues in water			
15	Aluminium (as Al)	mg/l	IS 3025 (Part 2)	0.03	0.2	BLQ (LOQ-0.02)
16	Boron (as B)	mg/l	IS 3025 (Part 2)	0.5	2.4	BLQ (LOQ-0.02)
17	Mercury (as Hg)	mg/l	Antr/7.2/Res.Inorg/01	0.001	No relaxation	BLQ (LOQ-0.001)
18	Iron (as Fe)	mg/l	IS 3025 (Part 2)	1.0	No relaxation	0.06
19	Copper (as Cu)	mg/l	IS 3025 (Part 2)	0.05	1.5	BLQ (LOQ-0.02)
20	Manganese (as Mn)	mg/l	IS 3025 (Part 2)	0.1	0.3	BLQ (LOQ-0.02)
21	Lead (as Pb)	mg/l	IS 3025 (Part 2)	0.01	No relaxation	BLQ (LOQ-0.01)
22	Zinc (as Zn)	mg/l	IS 3025 (Part 2)	5	15	BLQ (LOQ-0.02)
23	Nickel (as Ni)	mg/l	IS 3025 (Part 2)	0.02	No relaxation	BLQ (LOQ-0.01)
24	Total Chromium (as Cr)	mg/l	IS 3025 (Part 2)	0.05	No relaxation	BLQ (LOQ-0.02)

NOTE: ● Please see watermark 'Original Test Report' to confirm the authenticity of this report.● Results shall be referred to tested sample(s) and applicable to tested parameters only. ● Test report shall not be reproduced except in full without prior written approval of Anacon Labs. ● Liability of Anacon Labs is limited to invoiced amount only. ● Non-perishable and perishable sample(s) shall be disposed off after 30 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. ● #Permissible limit in absence of an alternate source for drinking water. ● 'mg/l' is equivalent to 'ppm'. ● 'µg/l' is equivalent to 'ppb'. ● BLQ= below limit of quantification , LOQ= limit of quantification. ● Environmental condition – Satisfactory, & clear● Statement of conformity issued on the basis of decision rule as per quality procedure (QP/7.8/05). ● pH Value was measured at 25°C.

REMARKS : Sample bearing the details mentioned as above is complying with IS 10500 (2012) requirements

Verified By	Signatory	Authorized Signatory
Pradnya Pillewan Deputy Technical Manager	Pooja Kathane Technical Manager	Chinmay Garway Deputy Quality Manager

----End of Report----

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Test Report

ULR No.-TC129982500001877F
Test Report No. : ALPL/31032025/10-20A dated: 31/03/2025 Page 1 of 2

Issued To : TATA STEEL LIMITED FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	Sample Inward No. Inward Date Work Order No.	ALPL/25032025/W-1/17-14 25/03/2025 3000144107/056-19.04.2022	Analysis Start 25/03/2025 Analysis End 31/03/2025 Report Issue Date 31/03/2025

Sample Description	Purpose of Analysis	Sample Condition	Quantity Received
Ground Water	Drinking	Sealed & Ice Preserved	5.0 Ltr & 250 ml
Sampled by	**Sampling Date**	**Sampling Time**	**Sampling Location / Source**
Anacon Representative Mr. Sunil Naik as per Sampling Method No.ANtd/7.2/MON-01	21/03/2025	12.25 pm	Near DG Set / Borewell

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
I	Discipline : Chemical		Group : Water			
1	pH	-	IS 3025 (Part 11)	6.5 to 8.5	No relaxation	7.81
2	Turbidity	NTU	IS 3025 : (Part 10)	1	5	0.1
3	Total dissolved solids	mg/l	IS 3025 (Part 16)	500	2000	453
4	Total Alkalinity (as Calcium Carbonate)	mg/l	IS 3025 (Part 23)	200	600	178.39
5	Total hardness (as $CaCO_3$)	mg/l	IS 3025 (Part 21) Clause 5	200	600	178
6	Calcium (as Ca)	mg/l	IS 3025 (Part 40) Clause 5	75	200	47.21
7	Magnesium (as Mg)	mg/l	IS 3025 (Part 46) Clause 6	30	100	14.76
8	Sulphate (as SO_4)	mg/l	IS 3025 (Part 24/ Sec1) Clause 5	200	400	9.21
9	Nitrate (as NO_3)	mg/l	IS 3025 (Part 34/sec 1) Clause 6.4	45	No relaxation	7.13
10	Chloride (as Cl)	mg/l	IS 3025 (Part 32) Clause 2	250	1000	28.42
11	Fluoride (as F)	mg/l	IS 3025 (Part 60/sec 1) Clause 6	1.0	1.5	0.16
12	Phenolic compounds	mg/l	IS 3025 (Part 43/Sec 1) Clause 6	0.001	0.002	BLQ (LOQ-0.001)

Please refer last Page for Note and Remarks.

Verified By	Signatory	Authorized Signatory
Snehal Raut Technical Manager	Pooja Kathane Technical Manager	Chinmay Ganeay Deputy Quality Manager

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Test Report

ULR No.-TC129982500001877F
Test Report No. : ALPL/31032025/10-20A dated: 31/03/2025 Page 2 of 2

Issued To : TATA STEEL LIMITED FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	Sample Inward No. Inward Date Work Order No.	ALPL/25032025/W-1/17-14 25/03/2025 3000144107/056-19.04.2022	Analysis Start Analysis End Report Issue Date	25/03/2025 31/03/2025 31/03/2025

Sample Description	Purpose of Analysis	Sample Condition	Quantity Received
Ground Water	Drinking	Sealed & Ice Preserved	5.0 Ltr & 250 ml
Sampled by	**Sampling Date**	**Sampling Time**	**Sampling Location / Source**
Anacon Representative Mr. Sunil Naik as per Sampling Method No.ANld/7.2/MON-01	21/03/2025	12.25 pm	Near DG Set / Borewell

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
II	Discipline : Biological		Group : Water			
1	Coliform	Per 100 ml	IS 15185	Absent	Absent	Absent
2	*Escherichia Coli*	Per 100 ml	IS 15185	Absent	Absent	Absent
III	Discipline : Chemical	Group : Residues in water				
2	Iron (as Fe)	mg/l	IS 3025 (Part 2)	1.0	No relaxation	0.26
3	Total Chromium (as Cr)	mg/l	IS 3025 (Part 2)	0.05	No relaxation	BLQ (LOQ-0.02)
4	Copper (as Cu)	mg/l	IS 3025 (Part 2)	0.05	1.5	BLQ (LOQ-0.02)
5	Selenium (as Se)	mg/l	IS 3025 (Part 2)	0.01	No relaxation	BLQ (LOQ-0.01)
6	Arsenic (as As)	mg/l	IS 3025 (Part 2)	0.01	No relaxation	BLQ (LOQ-0.01)
7	Cadmium (as Cd)	mg/l	IS 3025 (Part 2)	0.003	No relaxation	BLQ (LOQ-0.002)
8	Mercury (as Hg)	mg/l	Antri/7.2/Res.Inorg/01	0.001	No relaxation	BLQ (LOQ-0.001)
9	Lead (as Pb)	mg/l	IS 3025 (Part 2)	0.01	No relaxation	BLQ (LOQ-0.01)
10	Zinc (as Zn)	mg/l	IS 3025 (Part 2)	5	15	BLQ (LOQ-0.02)
11	Manganese (as Mn)	mg/l	IS 3025 (Part 2)	0.1	0.3	BLQ (LOQ-0.02)

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REMARKS : Sample bearing the details mentioned as above is complying with IS 10500 (2012) requirements.

Verified By,

Pradnya Pillewan
Deputy Technical Manager

Authorized Signatories

Pooja Kathane
Technical Manager

Chinmay Ganvey
Deputy Quality Manager

-----End of Report-----

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Test Report

ULR No.-TC129982500001879F
Test Report No. : ALPL/31032025/10-22A dated 31/03/2025

Page 1 of 2

Issued To :	Sample Inward No.	ALPL/250325/W-1/17-16 & 17	Analysis Start	25/03/2025
TATA STEEL LIMITED FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	Inward Date	25/03/2025	Analysis End	31/03/2025
	Work Order No.	3000144107/056-19/04/2022	Report Issue Date	31/03/2025
			Sample Category	Water

Sample Description	Sample Source	Sample Particulars	Sample Condition	Quantity Received
Surface Water	1. Upstream 2. Downstream	Sample Code-SW-1 & 2	Sealed & Ice Preserved	2.0 Ltr & 250 ml

Sampled by	Sampling Date	Sampling Time	Sampling Location
Anacon Representative Mr. Sunil Naik as per Sampling Method No.ANtd/7.2/MON-01	22/03/2025	1.25 & 1.55 pm	1. Sona River Upstream (SW-1) 2. Sona River Downstream (SW-2)

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Standards as per IS 2296:1992 Class C	Test Result	
					SW-1	SW-2
I	Discipline : Biological Group : Water					
1	Coliform	/100ml	IS 15185	5000	Absent	Absent
II	Discipline : Chemical Group : Water					
2	pH	-	IS 3025 (Part 11)	6.0 to 9.0	6.28	6.73
3	Colour	Hazen	IS 3025 (Part 4) Clause 4	300	26	24
4	Total Dissolved Solids (TDS)	mg/l	IS 3025 (Part 16)	1500	1453	1291
5	Chloride (as Cl)	mg/l	IS 3025 (Part 32) Clause 2	600	216	164
6	Sulphate (as SO_4)	mg/l	IS 3025 (Part 24/ Sec1) Clause 5	400	259	201
7	Nitrate (as NO_3)	mg/l	IS 3025 (Part 34/sec 1) Clause 6.4	50	24.86	18.32
8	Fluoride (as F)	mg/l	IS 3025 (Part 60/sec 1) Clause 6	1.5	0.42	0.36
9	Cyanide (as CN)	mg/l	IS 3025 (Part 27/Sec 1) Clause 5	0.05	BLQ (LOQ-0.005)	BLQ (LOQ-0.005)
10	Phenolic compounds	mg/l	IS 3025 (Part 43/Sec 1) Clause 6	0.005	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
11	Anionic Detergents (as MBAS)	mg/l	IS 3025 (Part 68)	1.0	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)

☐ Please refer last Page for Note and Remarks.

Verified By
Snehal Raut
Technical Manager

Authorized Signatories
Pooja Kathane
Technical Manager
Chinmay Garway
Deputy Quality Manager

Thank you for instilling your trust and faith in our services. We cherish our relationship with you, and we put in a lot of hard work in making sure that you get a seamless experience at every stage of your interaction with us. In our constant endeavour towards ensuring that your next experience will be significantly better than the current one, we welcome your feedback on feedback@anacon.in.

Anacon Laboratories Pvt. Ltd. Nagpur Lab
FP-34, 35,Food Park, Five Star Industrial Estate, MIDC Butibori, Nagpur, Maharashtra, India - 441 122
+ 91 8045685558 Email : info@anacon.in
https: // www.anaconlaboratories.com

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Anacon Laboratories

TC-12998

Test Report

ULR No.-TC129982500001879F
Test Report No. : ALPL/31032025/10-22A dated 31/03/2025

Page 2 of 2

Issued To : TATA STEEL LIMITED FAP JODA, Keonjhar, FAMD, ODISHA-758034 (India)	Sample Inward No. ALPL/250325/W-1/17-16 & 17 Inward Date 25/03/2025 Work Order No. 3000144107/056-19/04/2022	Analysis Start 25/03/2025 Analysis End 31/03/2025 Report Issue Date 31/03/2025 Sample Category Water	

Sample Description	Sample Source	Sample Particulars	Sample Condition	Quantity Received
Surface Water	1. Upstream 2. Downstream	Sample Code-SW-1 & 2	Sealed & Ice Preserved	2.0 Ltr & 250 ml

Sampled by	Sampling Date	Sampling Time	Sampling Location
Anacon Representative Mr. Sunil Naik as per Sampling Method No.ANtd/7.2/MON-01	22/03/2025	1.25 & 1.55 pm	1. Sona River Upstream (SW-1) 2. Sona River Downstream (SW-2)

TEST RESULTS

S.N.	Test Parameter	Measurement Unit	Test Method	Standards as per IS 2296:1992 Class C	Test Result	
					SW-1	SW-2
III	Discipline : Chemical			Group : Residues in water		
12	Iron (as Fe)	mg/l	IS 3026 (Part 2)	0.5	0.47	0.38
13	Cadmium (as Cd)	mg/l	IS 3025 (Part 2)	0.01	BLQ (LOQ-0.002)	BLQ (LOQ-0.002)
14	Selenium (as Se)	mg/l	IS 3025 (Part 2)	0.05	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
15	Arsenic (as As)	mg/l	IS 3025 (Part 37)	0.2	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
16	Lead (as Pb)	mg/l	3025 (Part 2)	0.1	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
17	Zinc (as Zn)	mg/l	IS 3025 (Part 2)	15	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
18	Mercury (as Hg)	mg/l	IS : 3025 (Part 48)	--	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
19	Manganese (as Mn)	mg/l	IS 3025 (Part 2)	--	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
20	Copper (as Cu)	mg/l	IS 3025 (Part 2)	1.5	0.07	0.04

NOTES: • Please see watermark 'Original Test Report' to confirm the authenticity of this report. • Results shall be referred to tested sample(s) and applicable to tested parameters only. • Test report shall not be reproduced except in full without prior written approval of Anacon Labs. • Liability of Anacon Labs is limited to invoiced amount only. • Non-perishable and perishable sample(s) shall be disposed off after 30 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. • 'mg/l' is equivalent to 'ppm'. • BLQ= below limit of quantification , LOQ= limit of quantification. • pH Value was measured at 25°C.

REMARKS : As requested by the client, the sample was tested for the above parameters only. The sample of above reference complies with requirement as per IS: 2296:1992 Class C, for tests conducted only.

Verified By	Signatory	Authorized Signatory
Pradnya Pillewan Deputy Technical Manager	Pooja Kathane Technical Manager	Chinmay Garwa Deputy Quality Manager

----End of Report----

Thank you for instilling your trust and faith in our services. We cherish our relationship with you, and we put in a lot of hard work in making sure that you get a seamless experience at every stage of your interaction with us. In our constant endeavour towards ensuring that your next experience will be significantly better than the current one, we welcome your feedback on feedback@anacon.in.

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Annexure- 3
Details of CSR funds allocated and released Expenditure against CSR Activities

Period	Year-wise expenditure Planning in (Rs. Cr.)	Actual Expenditure for C.S.R. in Rs. Cr.	Name of CSR activities (Joda region)
2018-19	10.21 Cr.	9.50 Cr.	Health, Drinking Water, Education, Rural Infra, Roads & Drains, Livelihood (Agriculture & Enterprise Dev.), Skill Development, Disability Screening Camp- 82 patients were provided with Prosthetics and orthopaedic aids and appliances, Support of School Infrastructure- SSVM, Joda, Support of School Infrastructure- Joda Valley Girls School, Construction of drain at Kundrunala, Awareness on flora and fauna.
2019-20	13.02 Cr	12.8 Cr	Health, Education, Livelihood, Rural Infrastructure, Major Project Like Kalyan Mandap in Joda
2020-21	18.84 Cr.	16.61 Cr.	Construction of Three bathing Ghat & two change room, Construction & renovation of Community Resource Centre (CRC) for their cultural & community needs, 115 toilets constructed in Kundrupani village, mobile medical units and ambulances, waiver for free treatment at Tata Steel Hospital, Joda, School improvement project (1000 Schools project), Women Empowerment Programmes.
2021-22	17.59 Cr.	14.53 Cr	Health, Drinking Water, Education, Rural Infra, Roads & Drains, Livelihood (Agriculture & Enterprise Dev.), Skill Development, Support of School Infrastructure- SSVM, Joda, Construction of total 111 nos. of IHHL at Palsa Kha & Ka village, mobile medical units and ambulances, waiver for free treatment at Tata Steel Hospital, Joda, School improvement project (1000 Schools project), Community Resource Centre (CRC) for their cultural & community needs.
2022-23 (Apr-Sep)	13.80 Cr	5.83 Cr	Health, Drinking Water, Education, Rural Infra, Roads & Drains, Livelihood (Agriculture & Enterprise Dev.), Skill Development, Support of School Infrastructure- SSVM, Joda, Construction of total 111 nos. of IHHL at Palsa Kha & Ka village, mobile medical units and ambulances, waiver for free treatment at Tata Steel Hospital, Joda, School improvement project (1000 Schools project), Community Resource Centre (CRC) for their cultural & community needs.
2022-23 (Oct-Mar)		7.94 Cr	Health, Drinking Water, Education, Rural Infra, Roads & Drains, Livelihood (Agriculture & Enterprise Dev.), Skill Development, Support of School Infrastructure- SSVM, Joda, Sports & Sports Infra Development, Agriculture equipment support, mobile medical units and ambulances, waiver for free treatment at Tata Steel Hospital, Joda, School improvement project (1000 Schools project), Community Resource Centre (CRC) for their cultural & community needs.
2023-24	34.78	30.44	Health, Drinking Water, Education, Rural Infra, Roads & Drains, Livelihood (Agriculture & Enterprise Dev.), Skill Development, Support of School Infrastructure- Joda, mobile medical units and ambulances, waiver for free treatment at Tata Steel Hospital, Joda, School improvement project (1000 Schools project), Community Resource Centre (CRC) for their cultural & community needs
2024-25 (April – Sep)	17.7	6.13	Health, Drinking Water, Education, Rural Infra, Roads & Drains, Livelihood (Agriculture & Enterprise Dev.), Skill Development, Support of School Infrastructure Joda, mobile medical units and ambulances, waiver for free treatment at Tata Steel Hospital, Joda, School improvement project (1000 Schools project), Community Resource Centre (CRC) for their cultural & community needs

Annexure- 4

ENVIRONMENTAL MONITORING RESULTS (October '24 to March'25)

Month	Location (Enter Name & Direction w.r.t Plant)	PM10- 24 hour Av. value (µg/m3)	PM2.5- 24 hour Av. value (µg/m3)	SO2- 24 hour Av. value (µg/m3)	NOx- 24 hour Av. value (µg/m3)	CO- 24 hour Av. value (mg/m3)	AQI
Oct-24	Gate No.1	62.2	23.8	13.0	21.8	<0.5	62.2
	General Office	54.7	20.3	11.1	19.3	<0.5	54.7
	Near ETP	51.3	18.5	11.0	19.8	<0.5	51.3
	Back Gate	58.8	21.5	11.4	21.5	<0.5	58.8
	Average	**56.8**	**21.0**	**11.6**	**20.6**	**0.0**	**56.8**
Nov-24	Gate No.1	57.6	21.6	11.3	22.7	<0.5	57.6
	General Office	61.7	23.8	11.6	23.9	<0.5	61.7
	Near ETP	64.1	24.7	11.3	19.2	<0.5	64.1
	Back Gate	67.2	28.4	12.9	24.1	<0.5	67.2
	Average	**62.7**	**24.6**	**11.8**	**22.5**	**0.0**	**62.7**
Dec-24	Gate No.1	63.36	27.48	12.36	23.53	<0.5	63.4
	General Office	58.36	19.38	9.79	18.80	<0.5	58.4
	Near ETP	59.23	21.00	11.36	19.66	<0.5	59.2
	Back Gate	60.86	20.98	11.48	19.14	<0.5	60.9
	Average	**60.5**	**22.2**	**11.2**	**20.3**	**0.0**	**60.5**
Jan-25	Gate No.1	67.2	29.7	13.5	27.1	<0.5	67.2
	General Office	53.9	18.7	10.3	18.0	<0.5	53.9
	Near ETP	53.5	20.4	10.3	18.7	<0.5	53.5
	Back Gate	53.8	19.5	11.7	20.7	<0.5	53.8
	Average	**57.1**	**22.1**	**11.5**	**21.1**	**0.0**	**57.1**
Feb-25	Gate No.1	63.1	28.5	12.4	24.0	<0.5	63.1
	General Office	58.4	18.8	9.2	19.4	<0.5	58.4
	Near ETP	58.8	19.7	10.2	20.4	<0.5	58.8
	Back Gate	61.5	22.7	11.3	22.1	<0.5	61.5
	Average	**60.4**	**22.4**	**10.8**	**21.5**	**0.0**	**60.4**
Mar-25	Gate No.1	65.0	25.8	11.7	24.7	<0.5	65.0
	General Office	58.1	19.5	9.6	19.6	<0.5	58.1
	Near ETP	59.7	20.4	11.0	21.0	<0.5	59.7
	Back Gate	62.0	24.4	11.5	21.9	<0.5	62.0
	Average	**61.2**	**22.5**	**11.0**	**21.8**	**0.0**	**61.2**

Annexure -5

Intimation Letter of EC to Zila Parishad

TATA

Ref : FAPJ/ 4136 /2015
Date : 9th Nov, 2015

To
President
Zilla Parisad
Keonjhar

Sub: Intimation of obtaining Environmental Clearance under EIA Notification-2006 for the expansion of Ferro Alloys Plant of TATA STEEL Ltd., Joda, Keonjhar District.

Dear Sir/ Madam,

We would like to inform you that Ministry of Environment Forests & Climate Change (MOEF&CC), Govt. Of India has granted Environmental Clearance for the expansion of capacity of our existing Ferro Manganese Plant from 0.0504 MTPA to 0.06 MTPA with 0.05 MTPA Sinter Plant & addition of 2*18 MVA SAF for 0.06 MTPA Slico Manganese production at our Ferro Alloys Plant, Joda, Odisha vide letter No. F. No. J-11011/03/2012- IA II (I) dt 05.11.2015.

We therefore request your good-self to kindly acknowledge the receipt of above letter.

Received one copy of Environmental clearance
12.11.15
P.A. to President Zilla Parishad Keonjhar

Yours Faithfully
F: Tata Steel Limited

HEAD
FERRO ALLOYS PLANT, JODA

Enclosed:

1. Xerox copy of Environmental Clearance

TATA STEEL LIMITED
Ferro Alloys Plant, Joda-758034, Dist. Keonjhar, Odisha, India
Tel. : 09238100945, e-mail : headoffice.fapj@tatasteel.com
Registered Office : Bombay House, 24, Homi Mody Street, Fort, Mumbai-400001, India
Tel. 91 22 66658282, Fax 91 22 66657724
Corporate Identity Number L27100MH1907PLC000260, Website : www.tatasteel.com

Intimation Letter of EC to Chairman, Joda Municipality

TATA

Ref : FAPJ/ 4135 /2015
Date : 9th Nov, 2015

To
Chairman
Joda Municipality
Joda.

Sub: Intimation of obtaining Environmental Clearance under EIA Notification-2006 for the expansion of Ferro Alloys Plant of TATA STEEL Ltd., Joda, Keonjhar District.

Dear Sir/ Madam,

We would like to inform you that Ministry of Environment Forests & Climate Change (MOEF&CC), Govt. Of India has granted Environmental Clearance for the expansion of capacity of our existing Ferro Manganese Plant from 0.0504 MTPA to 0.06 MTPA with 0.05 MTPA Sinter Plant & addition of 2*18 MVA SAF for 0.06 MTPA Slico Manganese production at our Ferro Alloys Plant, Joda, Odisha vide letter No. F. No. J-11011/03/2012- IA II (I) dt 05.11.2015.

We therefore request your good-self to kindly acknowledge the receipt of above letter.

Yours Faithfully
F: Tata Steel Limited

HEAD
FERRO ALLOYS PLANT, JODA

JODA MUNICIPAL COUNCIL
Dist. Keonjhar
JODA

Enclosed:

1. Xerox copy of Environmental Clearance

TATA STEEL LIMITED
Ferro Alloys Plant, Joda-758034, Dist. Keonjhar, Odisha, India
Tel. : 09238100945, e-mail : headoffice.fapj@tatasteel.com
Registered Office : Bombay House, 24, Homi Mody Street, Fort, Mumbai-400001, India
Tel. 91 22 66658282, Fax 91 22 66657724
Corporate Identity Number L27100MH1907PLC000260, Website : www.tatasteel.com

Annexure -6

Covering Letter of Form V, Environment statement submission

TATA

Ref. No. FAMD/FAPJ/ 249 /FY24 Dated: 26/09/2024.

The Member Secretary
State Pollution Control Board, Odisha
Paribesh Bhavan
A/118, Nilakantha Nagar, Unit-VIII
Bhubaneswar-751012

Sub: Submission of Environmental Statement of Ferro Manganese Plant, Joda for the period of 2023-24.

Dear Sir,

We are submitting one set of Annual Environmental Statement in FORM-V dully filled in for the year 2023-2024 in respect of M/s Ferro Manganese Plant, Joda by Tata steel for your kind consideration.

We wish to maintain that necessary control measures have been installed and adopted to minimize the impact on environment.

We look forward to further your guidance which shall certainly help us in endeavoring further improvements in our Environmental Management Practices.

Thanking you,

Yours faithfully,
For: TATA STEEL LTD.

Head & Factory Manager
Ferro Manganese Plant,
Joda

Encl: as above.

Copy to - Regional Officer, OPCB, At-Baniapatt, College Road, Keonjhar - with enclosure.

TATA STEEL LTD.
Ferro Alloys & Minerals Division
Ferro Manganese Plant, Joda
Joda – 758034, Odisha, India
Tel: 09238100945, e-mail –head.office@tatasteel.com
Regd. Office: Bombay House, 24 Homi Mody Street, Mumbai – 400 001

1 | Page

TATA

ENVIRONMENT STATEMENT

FOR THE FINANCIAL YEAR 2023-24

Submitted to SPCB under Rule 14 of The Environment (Protection) Rules 1986

TATA STEEL LIMITED
FERRO MANGANESE PLANT
JODA, KEONJHAR

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Annexure-7

Details of Publication on the Newspapers

THURSDAY
12 NOVEMBER
2015

The Statesman

www.thestatesman.com

PEOPLE'S PARLIAMENT, ALWAYS IN SESSION

Ferro Alloys Plant
M/s. Tata Steel Limited,
Joda, District- Keonjhar, Odisha

TATA
TATA STEEL

PUBLIC NOTICE

The Ministry of Environment, Forest and Climate Change (MoEF&CC), Govt. of India (IA Division), New Delhi has accorded Environmental Clearance vide letter no J-11011/03/2012-IA II(I), dated 05.11.2015 for expansion of Fe-Mn Alloy Plant of M/s Tata Steel Limited located at Joda, Keonjhar District, Odisha for enhancement of production of Ferro Manganese from 0.0504 MTPA to 0.06 MTPA and addition of 0.06 MTPA Silico-Manganese Plant and 0.05 MTPA Manganese Sinter Plant in existing Ferro Alloys Plant at Joda.

The copy of the Environmental Clearance is available with the State Pollution Control Board, Bhubaneswar, Odisha and may also be seen at the website of the Ministry of Environment, Forest and Climate Change at http:/envfor.nic.in.

-Sd-
Pankaj Kumar Satija,
General Manager (Operations),
FA & MD, Tata Steel Ltd

Published on The Statesman of 12th November 2015 Issue

ନେଇ ସାଧାରଣରେ ଚର୍ଚ୍ଚା ଚାଲିଛି। ପଡ଼ୁପୁର ପ୍ରଥମେ ବ୍ୟାଟିଂ କରି ୧୫.୧
ଓ୍ୱିକେଟ୍ ହରାଇ ୧୩୯ ରନ୍ କରିଥିଲା।

ଫେରୋ ଆଲୟେଜ୍ ପ୍ଲାଣ୍ଟ
ଟାଟା ଷ୍ଟିଲ ଲିମିଟେଡ୍,
ଯୋଡ଼ା, ଜିଲ୍ଲା-କେନ୍ଦୁଝର, ଓଡ଼ିଶା।

TATA
TATA STEEL

ସର୍ବସାଧାରଣ ବିଜ୍ଞପ୍ତି

ଭାରତ ସରକାରଙ୍କ ପରିବେଶ, ଜଙ୍ଗଲ ଓ ଜଳବାୟୁ ପରିବର୍ତ୍ତନ ମନ୍ତ୍ରାଳୟ (ଏମ୍‌ଓଇଏଫ୍ ଆଣ୍ଡ ସିସି), (ଆରଏ ଡିଭିଜନ୍) , ନୂଆଦିଲ୍ଲୀ ପକ୍ଷରୁ ଜାରି କରାଯାଇଥିବା ଚିଠି ସଂଖ୍ୟା J-11011/03/2012-IA II(I), ତା ୫.୧୧.୨୦୧୫ରିଖ ଅନୁସାରେ ଓଡ଼ିଶାର କେନ୍ଦୁଝର ଜିଲ୍ଲାର ଯୋଡ଼ାଠାରେ ଅବସ୍ଥିତ ଟାଟା ଷ୍ଟିଲ ଲିମିଟେଡ୍‌ର ଫେରୋ ଆଲୟେଜ୍ ପ୍ଲାଣ୍ଟକୁ ମନ୍ତ୍ରାଳୟ ଫେରୋ ମାଙ୍ଗାନିଜ୍ ଉତ୍ପାଦନ କ୍ଷମତା ବାର୍ଷିକ ୦.୦୫୦୪ ନିୟୁତ ଟନ୍‌ରୁ ୦.୦୬ ଟନ୍‌କୁ ବୃଦ୍ଧି ଓ ଏହାସହିତ ଯୋଡ଼ାଠାରେ ଥିବା ଫେରୋ ଆଲୟେଜ୍ ପ୍ଲାଣ୍ଟରେ ବାର୍ଷିକ ୦.୦୬ ନିୟୁତ ଟନ୍ କ୍ଷମତା ସମ୍ପନ୍ନ ସିଲିକୋ-ମାଙ୍ଗାନିଜ୍ ପ୍ଲାଣ୍ଟ ଓ ବାର୍ଷିକ ୦.୦୫ ନିୟୁତ ଟନ୍ କ୍ଷମତା ସମ୍ପନ୍ନ ମାଙ୍ଗାନିଜ୍ ସିଣ୍ଟର ପ୍ଲାଣ୍ଟ ପାଇଁ ପରିବେଶ ମଞ୍ଜୁରୀ ପ୍ରଦାନ କରିଛନ୍ତି।

ପରିବେଶ ମଞ୍ଜୁରୀର ନକଲ ଓଡ଼ିଶାର ଭୁବନେଶ୍ୱରସ୍ଥିତ ରାଜ୍ୟ ପ୍ରଦୂଷଣ ନିୟନ୍ତ୍ରଣ ବୋର୍ଡ଼ ନିକଟରେ ଉପଲବ୍ଧ ଏବଂ ଭାରତ ସରକାରଙ୍କ ପରିବେଶ, ଜଙ୍ଗଲ ଓ ଜଳବାୟୁ ପରିବର୍ତ୍ତନ ମନ୍ତ୍ରାଳୟ ୱେବ୍‌ସାଇଟ୍ http:/envfor.nic.in ରେ ମଧ୍ୟ ଦେଖାଯାଇପାରିବ।

. ପଙ୍କଜ କୁମାର ସଚିଜା,
ମହା ପ୍ରବନ୍ଧକ (ଅପରେସନ୍ସ)
ଏଫ୍‌ଏ ଆଣ୍ଡ ଏମ୍‌ଡି, ଟାଟା ଷ୍ଟିଲ ଲିମିଟେଡ୍

Published on Sambad of 13th November 2015 Issue

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